une, 1960 50 cents

PACIFIC FISHERMAN

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PAC OCEANIC FISHERY-
FISH & WILDLIFE SERV
P O BOX 3830
HONOLULU 12 HAWAII

N. F. I. Protests Food Codes p12

New Pacific Trawler Designs p29

What Will Bristol Bay Yield THIS Year ?

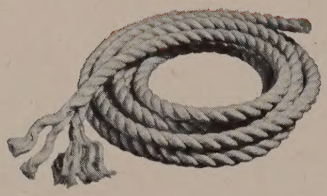
shing is a world industry; and the Pacific alone is half the world

A MILLER FREEMAN PUBLICATION

Now! Low Cost and High Strength in ONE NEW Rope...

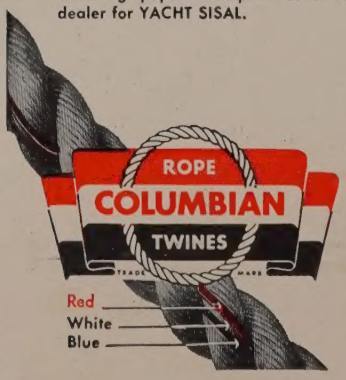
COLUMBIAN Pipes aboard the NEW

Yacht Sisal



A NEW 100% Sisalana rope with a softer construction and a firmer foreturn that offers greater resistance to kinking and hockling than ever before.

Available NOW in all 3 strand sizes up to and including ¾" diameter. Standard Put-ups including popular Colpack coils. Ask your dealer for YACHT SISAL.



COLUMBIAN proudly presents the newest member of its crew of fine ropes, the COLUMBIAN YACHT SISAL.

Light, handsome and easy to handle, the new YACHT SISAL is a full 20 percent stronger than any previous sisal rope and costs far less than many brands of Manila with similar breaking strengths.

COLUMBIAN rope experts developed a new construction for sisal rope and new lubricants as well. Combined, these two new exclusive COLUMBIAN features are responsible for the new, high breaking strength of YACHT SISAL.

Now, YACHT SISAL "on the average is as strong as Federal Specification TR-605 for Manila." However, COLUMBIAN Tape-Marked Pure Manila Rope exceeds substantially these strength figures.

Only COLUMBIAN can offer you YACHT SISAL and back it 100% by the COLUMBIAN reputation for the finest in all types of cordage. And, the same fibre-deep chemical treatment for water, rot and fungi that has distinguished COLUMBIAN ropes from all others is lavished on YACHT SISAL as well.

COLUMBIAN Rope Company

Auburn, "The Cordage City," N. Y.

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Our Fifty-Eighth Year — JUNE 1960 Vol. 58 No. 7

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Keep Your Eyes On PUERTO RICO

• Do you remember that, in 1957, **Pacific Fisherman** published a special edition, entitled: "The Fisheries of Peru—New Forces in a World Industry"; and then raised the question: "What Do They Mean to You?"

And that in the same year we published a preliminary report on the birth of fishing as a business in Puerto Rico?

• Those who asked **Pacific Fisherman's** question of themselves, and answered it aggressively, have prospered in fantastic fashion.

• And what of those who read **Pacific Fisherman** in 1957, who read the pointed question, but shrugged it off? What of them?

The answer is plain in the pains of the fish meal industry in many areas throughout the world—in the problems of those who did not believe in Peru, of those who did not read **Pacific Fisherman** nor heed its sharp suggestion.

Today the fish meal producers who failed to answer clearly the question: "The Fisheries of Peru—What do they mean to You" are in trouble, **serious trouble.**

• Today **Pacific Fisherman** looks at another aspect of tomorrow—at an aspect upon which it reported first in 1957, when we raised the question about the meaning of the upwelling in Peru.

Today we suggest—and our August issue will show you why—that you:

• **KEEP YOUR EYES ON PUERTO RICO.**

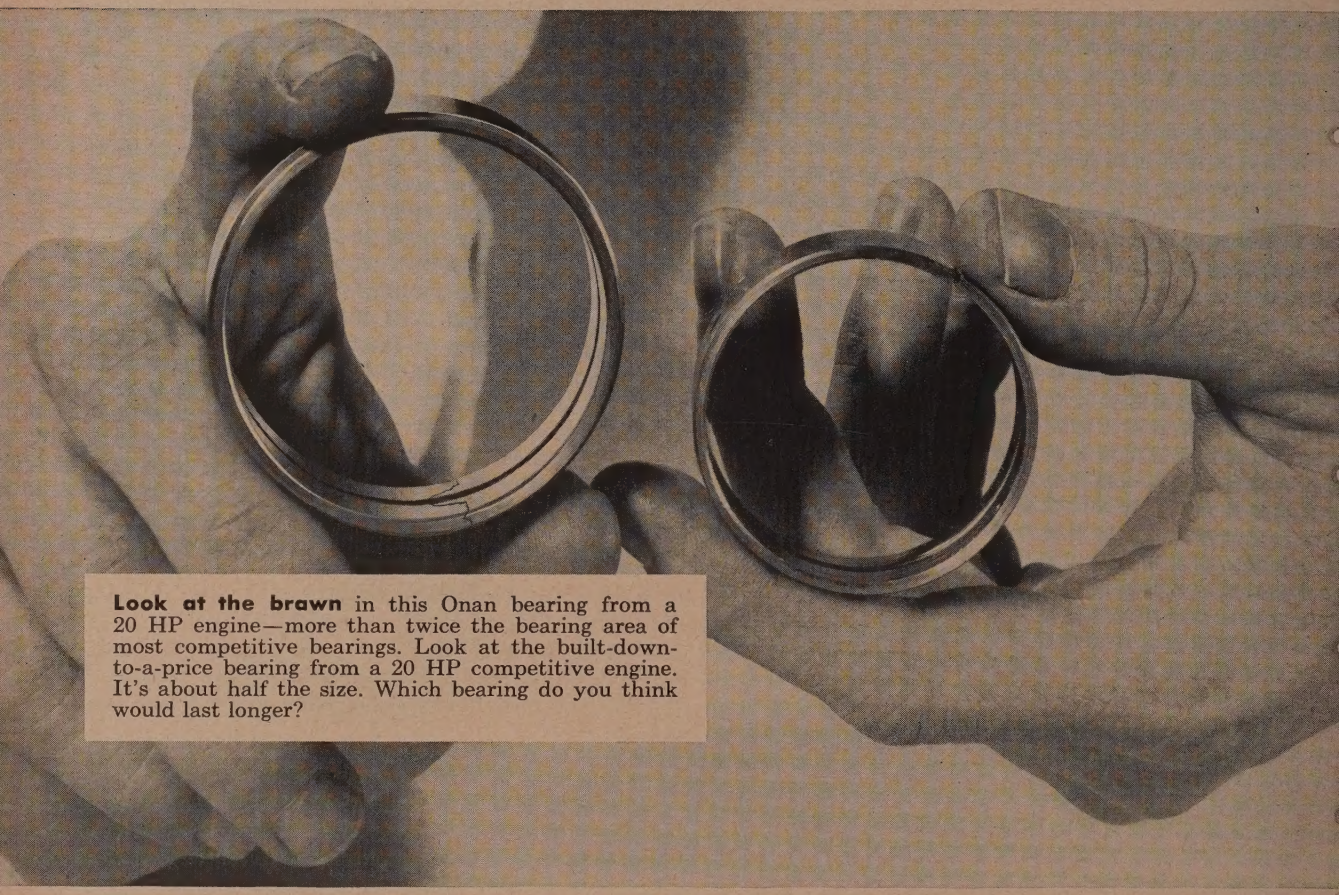
Japan-Russia Sign 1960 Fishing Pact

After about a hundred various conferences covering 107 days of nearly continuous negotiation, Japanese and Russian fishery authorities signed a pact in Moscow covering fishing agreements for 1960. The decision reached May 18 included a compromise in the question of Japanese catch quota at 67,500 metric tons of salmon (the Japanese had asked for 85,000 tons and the Russians had insisted on 50,000).

During the long and difficult course of the meetings, Russians held that salmon resources had markedly decreased because of Japanese high seas fishing, particularly Pink salmon. Length of season was finally kept unchanged, net mesh size as before, and closed area slightly increased off the Kurile Islands.

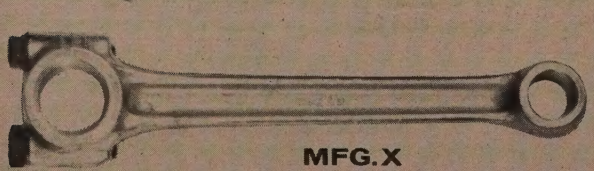
Research is to continue, with mutual exchange of scientific personnel on research vessels.

Big, beefy bearings make than ordinary

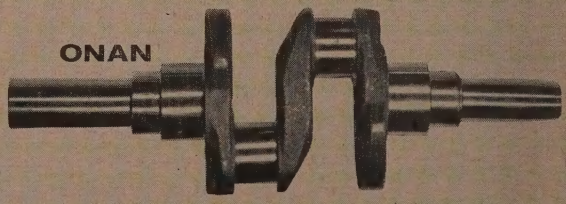


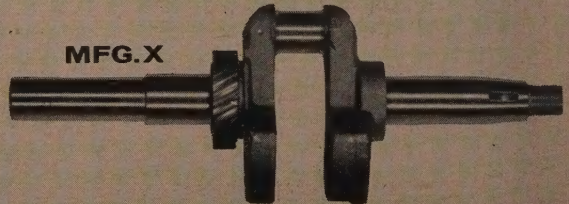
Look at the brawn in this Onan bearing from a 20 HP engine—more than twice the bearing area of most competitive bearings. Look at the built-down-to-a-price bearing from a 20 HP competitive engine. It's about half the size. Which bearing do you think would last longer?

Connecting rods—The shorter stroke of the Onan engine permits the use of a shorter rod, a more rugged design that stands up longer under heavy duty service—another example how Onan builds *up* to performance, not down to a price.



Crankshafts—Larger diameters of main and rod journals make Onan crankshafts stiffer and stronger, minimizing the possibility of breakage or bending. More "muscle" throughout Onan engines means longer life, extra years of full-rated performance.





Onan last years longer electric plants

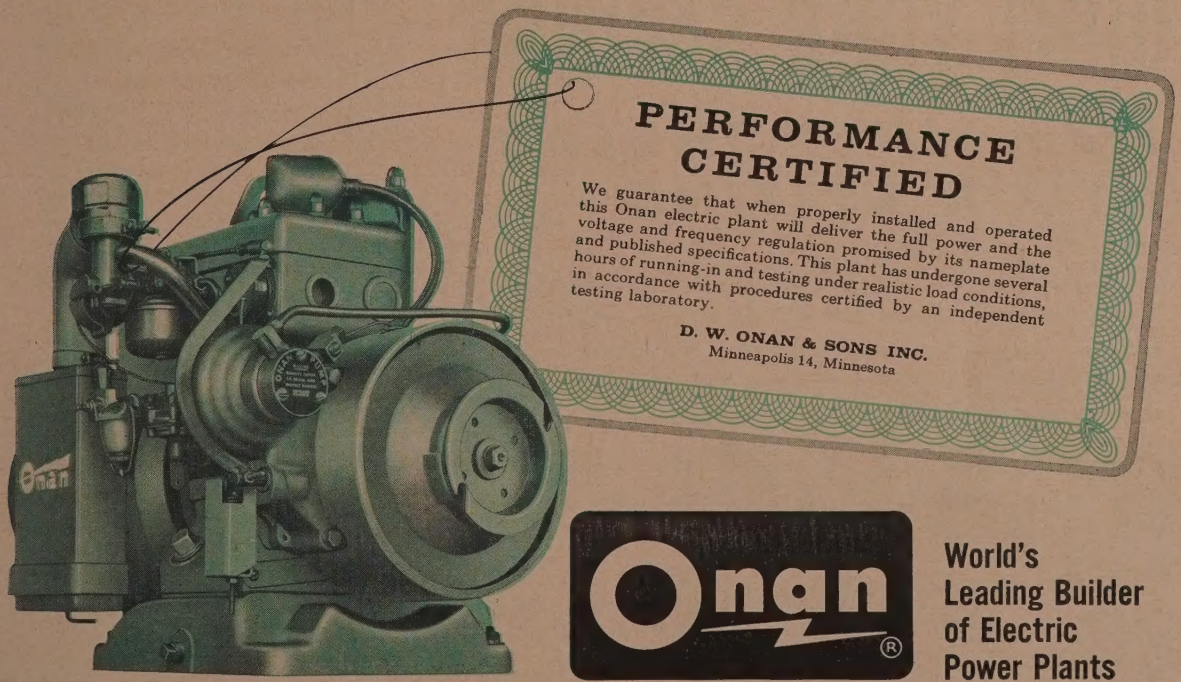
Onan bearings are about twice the size of most competitive bearings

Bearings take a beating in any engine. But, with Onan's bigger bearings the strain is spread over a wider area, giving you longer, more economical engine life.

This is just one example of the extra quality you find in Onan Electric Plants. Each one is checked out at full load for hours before it goes to the shipping dock. Engineers have designed 134 separate tests to make sure it operates the way it is supposed to. Not only that, inspectors from independent laboratories pay surprise visits to the Onan factory, pull units off the line and put them through their paces. It's a double check—on Onan tests and testing methods.

There's an Onan representative near you, ready to tell you about the complete line of Onan Plants, from 500 watts to 230,000 watts. Look for his name in the telephone classified section in all major cities, or write direct.

ONLY ONAN GIVES YOU THIS GUARANTEE


PERFORMANCE CERTIFIED
We guarantee that when properly installed and operated this Onan electric plant will deliver the full power and the voltage and frequency regulation promised by its nameplate and published specifications. This plant has undergone several hours of running-in and testing under realistic load conditions, in accordance with procedures certified by an independent testing laboratory.
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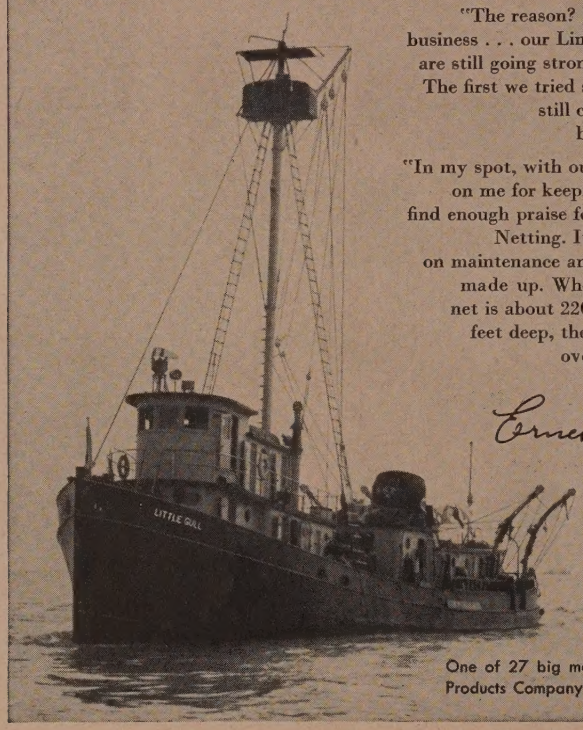
"It's my job to see to it that the 27 boats of the Fish Products Company here at Lewes are properly supplied with nets. I have the company 100% Linen Thread Nylon rigged.

"The reason? Why, it's simply smart business . . . our Linen Thread Nylon Nets are still going strong after millions of fish. The first we tried some three years ago is still catching fish. You can't beat that for toughness.

"In my spot, with our large fleet depending on me for keeping the nets up, I can't find enough praise for Linen Thread Nylon Netting. It means less man hours on maintenance and fewer new nets to be made up. When you figure that each net is about 220 fathoms long and 110 feet deep, the amount of time saved over a year is incredible."

Ernest T. Fisher

Chief Net Man—
Fish Products Co.,
Lewes, Delaware
(pictured at right)



One of 27 big menhaden seiners in the Fish Products Company fleet at Lewes, Delaware.

COUNT YOUR SAVINGS

from LINEN THREAD NYLON NETTING

Few fishermen can test netting on the gigantic scale described above by Net Man Ernest Fisher. But all fishermen can benefit from his experience . . . can reduce their fishing costs and up their profits . . . by getting the savings in maintenance and replacement costs he reports from the use of LTCO Nylon Netting.

Follow his example: choose Linen Thread Brand Nylon Seine and Gill Nettings, the dependable products of America's most experienced netting manufacturer.

THE LINEN THREAD CO., INC.
BLUE MOUNTAIN, ALABAMA
America's First Authority . . . Leaders In Netting Developments For More Than a Century

SWEEP NEW PROFITS FROM THE SEA WITH
LTCO'S PROVED PRODUCTS

Linen Thread products for commercial fishing include:

The famous **Adams Best** and **Pauls** Brands of Netting . . . complete lines of synthetic and cotton nettings and seine twines for every commercial fishing need.

Barbour's Nylon seine and gill netting . . . **Gold Medal** cotton netting and seine twines in cotton and filament nylon.

Nyak Netting and Seine Twine . . . advantages of nylon at a big saving.

Knox's Knotless Nylon Seine Netting of superior interlocked design.

Netset, the perfected preservative for cotton and synthetic nettings.

Ark Plastic Floats . . . amazingly buoyant, durable, tough.

PROTECT YOUR MARKETS . . . BUY THE PRODUCTS OF AMERICAN WORKERS!

"WITH OUR CAT D342, WE GET MORE FISH TO MARKET FASTER AND IN BETTER SHAPE"

This is the kind of performance that makes the fishing business good for Captain Nels M. Lee, owner-skipper of the 72-foot *Nordby*. And Captain Lee should know, for he has been master of the *Nordby* since it was built in 1928, 32 years ago. Here's what he says about the Caterpillar Marine Engine on his vessel: "In July of 1958, we installed a D342 Turbo Caterpillar Diesel in our 72-foot fishing vessel *Nordby* and have had nothing but satisfactory performance.

"With our Caterpillar, we can make 20 extra nautical miles for each 24-hour day, going to the banks and returning to market. This helps the boat get to market sooner and this is always important.

"The *Nordby* makes about four halibut fishing trips a year to the Area Three banks in the Gulf of Alaska and Portlock Bank. This season begins about the first of May and ends usually in the latter part of August, under International Fisheries Commission regulations. When not halibut fishing, the *Nordby* engages in tuna fishing and 'scrap' fishing for cod off the Washington and Oregon coasts.

"You don't have to oil the Caterpillar Diesel, just change oil every 240 hours. You don't have to be an expert diesel engineer any more, for the Caterpillar is easy to start. Just push the button and she's off.

"Since we installed our Caterpillar Diesel, we have never failed to complete a trip, and we get the fish to market faster and in better shape, which means more dollars for us."

Modern Cat Engines are available from 62 HP to 600 HP (continuous ratings). Your nearby Caterpillar Dealer can recommend the correct engine or Caterpillar Electric Set for your boat. Twelve Caterpillar Marine Electric Sets are available up to 350 KW capacity in 50 or 60 cycle operation, AC or DC, single or three phase. You can save money with Caterpillar Marine Engines . . . and make a better living, too.

Captain Nels M. Lee, owner of the Nordby, is from Seattle. His vessel is a well-known unit of the Seattle fishing fleet.

MARINE POWER BY CATERPILLAR

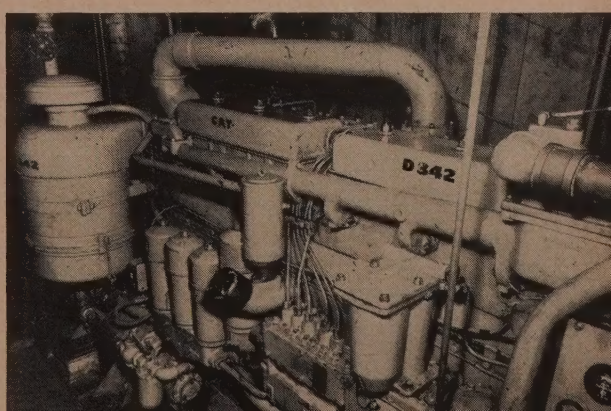
CATERPILLAR

Caterpillar and Cat are Registered Trademarks of Caterpillar Tractor Co.

Engine Division, Caterpillar Tractor Co.,
Peoria, Illinois, U.S.A.

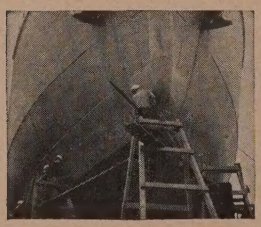
The Cat D342 gives the 72-foot Nordby a speed of 9.75 knots in 24-hour service with fuel consumption of about 10 gallons an hour.

The Turbocharged Cat D342 Marine Diesel, shown here in the Nordby's engine room, is rated 220 HP @ 1225 RPM (continuous). Its low over-all cost an operating hour and minimum of down time prove it to be an ideal engine for vessels of this size.



BE READY
WHEN THE FISH RUN!

It pays in more fish, less labor, paint and fuel to use a high quality INTERNATIONAL Bottom Paint. In the first place, the bottom stays clean so you are ready to catch fish when the fish are there. In the second place, you need to paint less frequently thus saving labor and paint. Then, because the bottom is clean, you require less fuel. There is a moderately priced INTERNATIONAL Bottom Paint for every type of vessel. Send for color cards and price lists.



FOR METAL BOTTOMS

INTERNATIONAL has developed a combination of a primer and anti-fouling bottom paint that offers maximum protection at minimum cost for painting metal bottoms. Request 'INTERLUX' Silver Primocon and 'INTER-TROP' No. 50 Antifouling Circulars.

International
ANTIFOULING
BOTTOM PAINTS

International MARINE PAINTS

International Paint Company, [Cal.] Inc.

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21 West Street, New York 6, N.Y.
628 Pleasant St., New Orleans 15, La., and Daytona Beach, Fla.

WORLD'S LARGEST MARINE PAINT MAKERS

NORTHILL ANCHOR

DIGS FAST... HOLDS FAST... BREAKS OUT EASY

Scientifically designed for boats up to 80 feet. Lightweight...3 to 105 lbs., easy to handle and stow. Most popular and dependable anchor for 20 years!

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AIR CRUISERS DIVISION
BELMAR, NEW JERSEY

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IT SERVES THE FISHERMAN'S EVERY NEED

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MANILA ROPE • PURSE LINES
TOW LINES • POT WARP • NET ROPE
"STABILIZED" FILAMENT AND SPUN NYLON AND DACRON ROPE
FILAMENT AND SPUN NYLON SEINE TWINE
ALSO POLYPROPYLENE AND POLYETHYLENE ROPES

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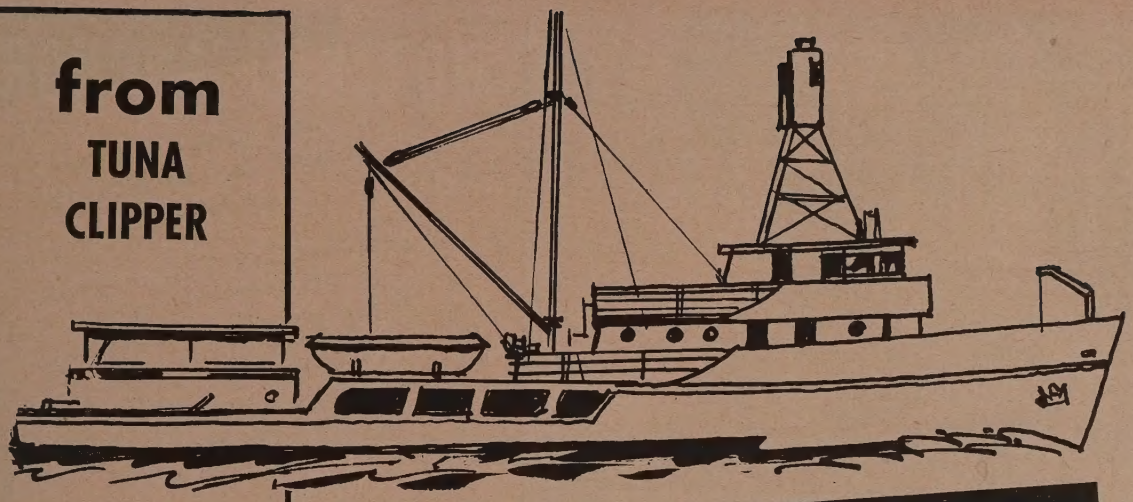

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CONVERSIONS

are designed and built by
experienced purse seine fishermen

*check the dollar & cents advantages
which our "know-how" has over
other yards*

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Boat Builders Since 1896
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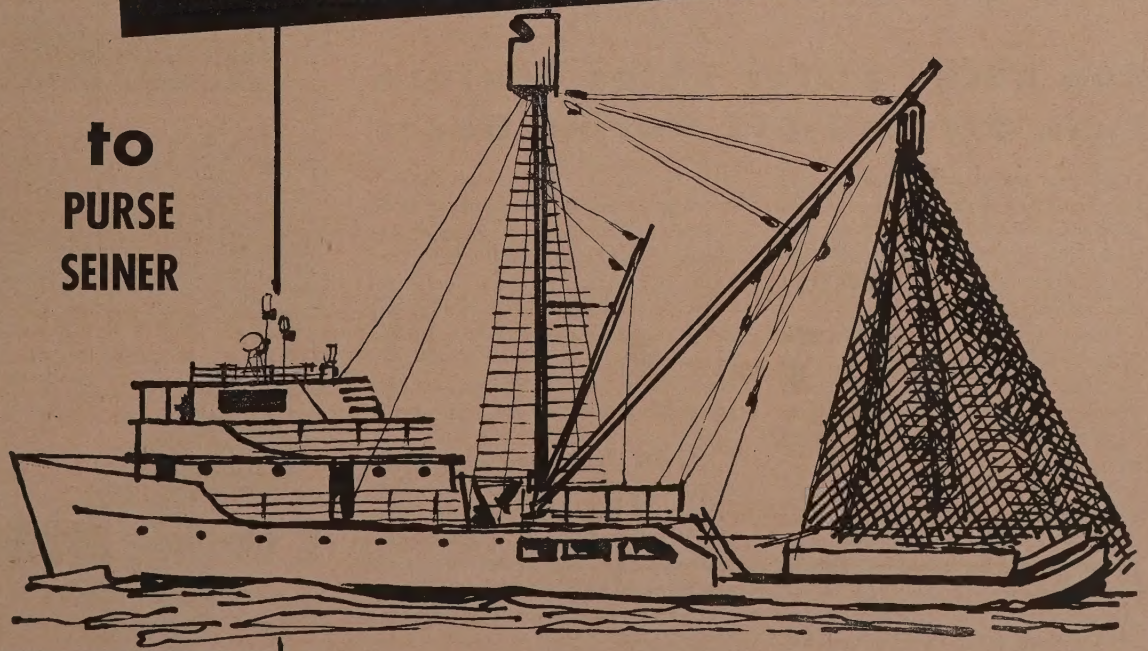
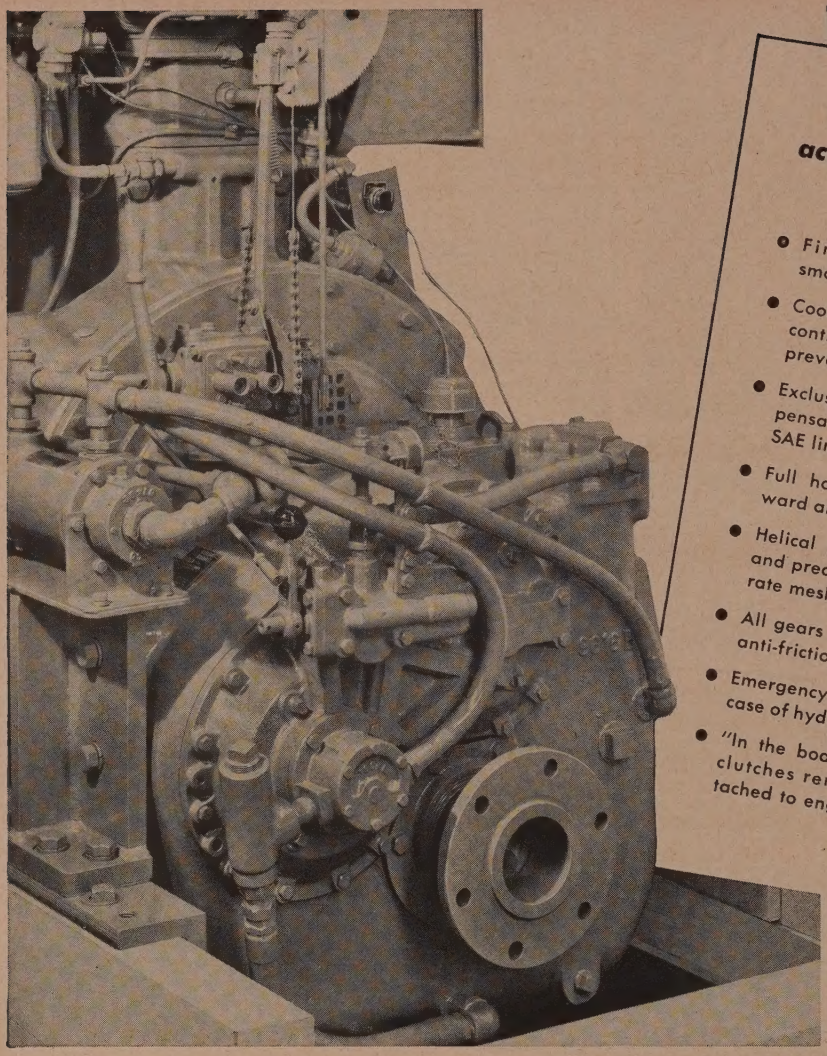
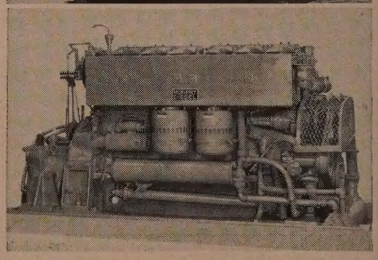
to
PURSE
SEINER





These design features account for the MG-512's popularity

- Fingertip hydraulic control for smooth, instantaneous response.
- Cooling oil pumped through clutches continuously to dissipate heat and prevent plate wear.
- Exclusive Rubber Block Drive to compensate for misalignment up to full SAE limits.
- Full horsepower in continuous forward and reverse operation.
- Helical gears carburized, hardened and precision-ground for quiet, accurate meshing.
- All gears straddle-mounted on large anti-friction bearings.
- Emergency "come home" feature in case of hydraulic system failure.
- "In the boat" serviceability — both clutches removable with gear attached to engine.



In the *Nokomis*, the Twin Disc MG-512 Marine Gear is installed behind the Murphy ABD-227 Engine shown above.

Soo Locks Sister Ships Feature Twin Disc MG-512 Marine Gears

"This gear works like a charm," says Captain L. E. Nolan, skipper of the *Nokomis*. He's talking about the Twin Disc MG-512 Hydraulic Marine Gear's performance behind his Murphy ABD-227 Diesel.

With a crew of four, the *Nokomis* operates daily from May 1st through October 15th, carrying sightseers through the Soo Locks. As many as 294 passengers can be accommodated on her twin decks.

The *Nokomis'* sister ship, *Levoyageur,* is also equipped with an MG-512 Marine Gear. Both pleasure vessels are owned by Soo Locks Cruises and operate out of Sault Ste. Marie, Michigan.

In the two years since its introduction, the MG-512 has earned the unstinting praise of hundreds of boat operators. With a maximum speed capacity of 2300 rpm, it is the most versatile gear in the Twin Disc line, well-suited to all types of vessels including work, fishing and pleasure craft. Seven ratios—2:1 to 6:1—in two different boxes permit selection of the most efficient wheel for any operation.

The MG-512 is recommended for many makes of engines, including models of Allis-Chalmers, Caterpillar, General Motors, International, Murphy and Waukesha. Bulletin 319-12 gives full details. Write Twin Disc Clutch Company, Racine, Wisconsin.

TWIN DISC
CLUTCHES AND HYDRAULIC DRIVES

TWIN DISC
Marine Gears

PACIFIC FISHERMAN June, 1960

1960 Salmon Canning Operations for Alaska and Puget Sound

Following are the principal Alaska and Puget Sound salmon canning operations projected for 1960 as they have been reported to *Pacific Fisherman* by the principals. Some omissions have been unavoidable through failure of companies to report their programs. In cases of consolidated operations, the company whose cannery is active is named first in capital letters, followed by the name or location of the cannery; and then by the names of other companies participating in the consolidated activity.

Western Alaska

ALASKA RED SALMON CO., Dillingham—Consolidating: Pacific American Fisheries, Columbia River Packers Association, New England Fish Co.

AMERICAN PACKING CO., Naknek — Consolidating: Whiz Fish Co.

HENRY BOGLER, Andreafsky (Yukon River).

CWC PACKING CO., Ekuk — Consolidating: Alaska Packers Association, Columbia River Packers Association.

COLUMBIA RIVER PACKERS ASSOCIATION, INC., Naknek—Consolidating: Red Salmon Canning Co., Columbia Wards Fisheries, Alaska Packers Association.

EGEGIK PACKING CO., Egegik—Consolidating: Intercoastal Packing Co., P. E. Harris Co.

ISLAND SEAFOODS, INC., Togiak

KAYAK PACKING CO. (Floating), Bristol Bay

NAKNEK INDEPENDENT PACKING CO., South Naknek

NEW ENGLAND FISH COMPANY, Pederson Point — Consolidating: Pacific American Fisheries.

NORTHERN COMMERCIAL CO., Kwiguk

PACIFIC AMERICAN FISHERIES CO. — Information not available.

YUKON PACKERS, St. Marys

YUKON RIVER FISHERMEN COOPERATIVE, Alakanuk

Central Alaska

ALASKA PACKERS ASSOCIATION — Information not available.

BERMAN PACKING CO., Ninilchik

BIG POINT SEAFOOD CO., Big Point, via Cordova

CWC PACKING CO., Kenai

COPPER RIVER CO-OP CO., INC., Cordova

CRYSTAL FALLS FISH CO., Crystal Falls

EMARD PACKING CO., INC., Anchorage

P. E. HARRIS COMPANY, INC., False Pass

J. H. HOEKZEMA CANNING CO., Kasilof

KADIAK FISHERIES CO., Port Bailey—Consolidating: San Juan Fishing & Packing Co., Ouzinkie Packing Corp., Pacific American Fisheries, Parks Canning Co., King Crab, Inc., Columbia Wards Fisheries, Washington Fish & Oyster Co.

KENAI PACKERS, Kenai

KING CRAB, INC., Kodiak — Consolidating: Columbia Ward Fisheries, Kadiak Fisheries, Ouzinkie Packing Co., Parks Canning Co., San Juan Fishing & Packing Co., Washington Fish & Oyster Co.

NEW ENGLAND FISH CO., Orca—Consolidating: Alaska Packers Association, Western Fisheries Co.

PACIFIC AMERICAN FISHERIES CO. — Information not available.

SHELTER COVE PACKING CO., Cordova

CHARLES L. SIMON SEAFOODS, Kasilof

SNUG HARBOR PACKING CO., Snug Harbor

TIDEWATER PACKING CO., Anchorage

Southeast Alaska

ALASKA YEAR ROUND CANNERIES CO., Seldovia—Consolidating: Fidalgo Island Packing Co., Whitney & Co., Cook Inlet Packing Co., Pacific American Fisheries, Port Chatham Packing Co.

ANNETTE ISLAND CANNING CO., Metlakatla—Consolidating: Fishermen's Packing Corp.

EXCURSION INLET PACKING CO., Excursion Inlet

FISHERMEN'S PACKING CORPORATION, Southeast Alaska — Consolidating: Annette Island Canning Co., Hydaburg Cooperative Association, Hood Bay Salmon Co., Klawock-Oceanside Packing Co.

HAINES PACKING CO., Letnikof Cove

P. E. HARRIS COMPANY, INC., Hawk Inlet

HOOD BAY SALMON CO., Hood Bay—Consolidating: Fishermen's Packing Corp.

KAYLER-DAHL FISH COMPANY, INC., Petersburg

KEKU CANNING CO., Kake—Consolidating: Whiz Fish Products

KLAWOCK OCEANSIDE PACKING CO., Klawock — Consolidating: Hydaburg Cooperative Association, Fishermen's Packing Corp.

LUTAK FISH CO., Haines

NAKAT PACKING CO.—Information not available.

NEW ENGLAND FISH CO., Chatham

NEW ENGLAND FISH CO., Ketchikan—Consolidating: Fidalgo Island Packing Co.

PELICAN PACKING CO., Pelican

PACIFIC AMERICAN FISHERIES CO. — Information not available.

PETERSBURG PROCESSORS, INC., Petersburg

SAN JUAN FISHING & PACKING CO., Port San Juan

SELDOVIA-PORT GRAHAM, Seldovia—Consolidating: Whitney & Co., Alaska Year-Round Canneries, Fidalgo Island Packing Co.

WARDS COVE PACKING CO., INC., Ketchikan—Consolidating: Columbia Wards Fisheries, Alaska Packers Association, Pacific American Fisheries, Excursion Inlet Packing Co.

WHIZ FISH PRODUCTS CO., Kake — Consolidating: Keku Canning Co.

Puget Sound

AMERICAN PACKING CO., Anacortes, Wash.

BURK-FIDALGO PACKING CO., Bellingham

COLUMBIA RIVER PACKERS ASSOCIATION, INC., Bellingham, Wash.—Consolidating: Alaska Packers Association, Nakat Packing Co., Sebastian-Stuart Fish Co., Pacific American Fisheries, Inc.

CROWN SEAFOOD SALES, INC., Pier 47, Seattle

DRESSEL-COLLINS FISH CO., Pier 66, Seattle

FISHERMEN'S PACKING CORPORATION, Anacortes

FOOD SPECIALTY COMPANY, INC., 6535 6th Ave. S., Seattle

IWERSON CANNING CO., Point Roberts

JOHN C. JACKSON, INC., Friday Harbor

PETERSBURG PROCESSORS, INC., Seattle

RUPERT FISH CO., INC., d/b/a Seaport Fish Co., Pier 57, Seattle

SEATTLE SEAFOODS, INC., Pier 61, Seattle

SEBASTIAN-STUART FISH CO., Anacortes

WASHINGTON FISH & OYTER CO., INC., Pier 54, Seattle

WHITNEY & COMPANY, Anacortes

WHIZ FISH PRODUCTS CO., La Conner

Peru's Anchovy Fleet Goes Fishing Again

The anchovy fleet out of Callao and Chimbote, Peru, which supplies the world's biggest fish-meal industry, was fishing again in May after a long tie-up caused by differences of opinion between boat owners and fishermen on shares, benefits and other issues.

The issues were not settled, but the fishermen agreed to return to fishing pending arbitration.

Another recent development in Peru's growing fishing industry was the publication of a new Government decree regulating the industry. Salient points are:

Foreign vessels may not fish in Peruvian waters without express permission;

Fishermen are classified by categories, each category has its obligations, certain documents are required, and the decree tells where to obtain them;

Fishing vessels are under the control of the Captain of the Port of the region involved. Port Captains are responsible for protection not only of fish and fish stocks, but of guano birds too;

Vessels are classified, requirements for each class are listed, necessary documents described, and notice is given where they are to be obtained;

Three types of work contracts are described.

Previous to the tie-up, the fish-meal plants had been under fire for causing strong odors which wafted over the neighboring city of Lima. Many of the plants took advantage of the work stoppage to clean up their equipment and, in some cases, install odor control devices.

Will Tuna Seiners Land 100,000 Tons This Year?

● Southern California tuna fishing, although slackening off a bit in recent weeks, in comparison with the experience last year, was still good.

The total tonnage caught by US-based vessels, as given by the Bureau of Commercial Fisheries Market News Report, was 43,695 for the period between January 1 and May 7, 1960. This was just about on a level with the 43,075 landed by US-based fishing boats in the same period of 1959, and noticeably below the 45,890 tons racked up in the same portion of 1958.

Transshipments from U. S. flag vessels based in foreign ports were off this year under last—2662 tons transshipped in 1960 from Jan. 1 to May 7, as against a corresponding figure of 3995 for 1959.

Imports were down substantially below both 1959 and 1958 totals for the January-May period. Last year, 30,646 tons had been imported up to May 7. This year, the total was 25,940 tons, a total still substantially greater than the 1958 total of 20,215 tons, as reported by the Market News Service.

Southern California Domestic Tuna Deliveries

Cumulative totals for 1960 through May 14, in tons, as reported by U.S. Market News Service

	Albacore	Bluefin	Skipjack	Yellowfin	Bonito, etc.	Total
Clippers and Albacore Fleet	....	....	7,663	9,935	...	17,598
Purse Seiners	4	110	885	30,379	20	31,394
Total 1960 through May 14	4	110	8,548	40,314	20	48,992
Total 1959	2,006		18,790	27,883	113	48,792
Total 1960	1,588		19,182	28,101	309	49,184

More Seiners Catch More Fish

The trend toward converting tuna clippers to purse seiners continued and speeded up during the month. In the March issue, *Pacific Fisherman* printed an up-to-that-date list of 27 clippers either converted or on the way definitely to conversion. At this time, the list has grown to 57 vessels, more than twice as many as three months ago.

And the new seiners were catching the fish.

The Market News Service breaks down the catch as between "regular" (that is, non-converted seiners, vessels that always have been seiners) and conversions. This year, the conversions caught 13,348 tons (Jan. 1 to May 7) as against 14,491 tons caught by the regulars. Last year the comparable figures were 2198 tons to 13,939.

The clipper catch, naturally, continued to decline, since more and more clippers, through conversion, were throwing their tonnage to the purse-seiner column. Last year in the January-May 7 period, the clippers landed 26,938 tons, the Market News Service says, while the seiner catch was 16,137. This year the tables are just about turned, the clippers accounting for 15,856 tons while the seiners brought in 27,839 for the period from January 1 to May 7.

Southern California Receipts

	Albacore	Bluefin	Skipjack	Yellowfin	Bonito, etc.	Total
San Pedro	8,142	171	8,163	44,537	20	61,033
San Diego	2,400	....	4,842	4,461	...	11,703
Total 1960 through May 18	10,542	171	13,005	48,998	20	72,736
Total 1959	7,009	2,027	21,904	46,368	113	77,421
Total 1958	5,325	1,668	20,708	39,977	289	67,967

Prediction: 100,000 Tons

V. J. Samson, the Market News reporter, last month went out on a limb and predicted that the purse seine fleet this year would catch 100,000 tons of tuna.

He based this prediction on the facts that by July 1, 1960, there would be nearly 100 large seiners actively fishing; and that the best time of the year for fishing is yet to come, in the late summer and early fall.

As he made his prediction, there were 20 seiners on the way home from the fishing grounds, loaded with a total of around 3500 to 4000 tons. Adding these to the 27,839 tons caught as of May 7, Mr. Samson made another prediction that by the end of May the seiners would have caught 35,000 tons of tuna.

This, he pointed out, would be a notable record, since the total seiner catch for 1959 was only 41,000 for the entire year. He did hedge on his 100,000-ton 1960 prediction to the extent of saying that it was based on normal fishing conditions and no fleet tie-ups for any reason.

If the 100,000-ton prediction comes true, the seiner-caught tonnage will more than double the previous record year, 1959, when the net boats caught 41,000 tons.

The big catches recently, it was said, were being made off White Friars, near Acapulco, Mexico, somewhat farther north than the previous concentration off Tehuantepec. Previously, fishing had been more scattered along the coast all the way from the tip of Baja California to the isthmus of Tehuantepec.

Among the fleet gossip was a rumor of a Japanese long-liner fishing well out to sea off Baja California. She was said to have put into Cape San Lucas for supplies; but fishing was said not to be too good, the longliner having caught mostly sharks. So went the rumor, entirely unverified.

Merger Called Off

The proposed merger of Van Camp Sea Food Co. and California Packing Corp. (Del Monte brand), which made big news in the industry some months ago — and which seemed assured, according to reports—has been abandoned, according to a joint statement by Gilbert C. Van Camp and Roy G. Lucks, Calpak president.

The statement said that although the managements agreed on the basis of a merger agreement, practical problems had appeared that seem impossible to solve.

National Fisheries Institute Protests

"Unrealistic," "Impractical," "Capricious" "Arbitrary," "Bureaucratic," "Harassment"

● Reacting sharply to programs which threaten in the name of health and pure food to raise the cost of food and impose unrealistic and impractical conditions upon the industry, the National Fisheries Institute at its May Convention in Miami Beach "vigorously insisted that improvement in frozen food handling methods can be accomplished better by cooperative industry action than by state, federal, or municipal government statutory or regulatory actions."

This language from the resolution adopted by the Institute, and the other words in the heading of this article characterizing the proposed governmental actions are typical of the terms heard throughout the Convention discussion particularly with respect to the proposed code for frozen food handling adopted by the Association of Food and Drug Officials of the United States, and due to go into effect in Massachusetts in August.

Not the subject of general Institute action, but widely discussed by its committee on smoked and cured fish, was the current action of the Food & Drug Administration in holding that methods that the government of the United States accepts as producing wholesame food in the case of meats are unwholesome when applied to fish.

These questions of the AFDOUS (Association of Food and Drug officials of the United States) code proposals and problems arising under the food additives amendment to the Food & Drug laws were among the primary topics of the Miami Convention, and will be dealt with separately and more fully elsewhere in this report.

● The Convention closed with the election of Thomas D. McGinnes, president of the Virginia Seafoods, Inc., Irvington, Va. as president of the National Fisheries Institute for the next term.

Mr. McGinnes, beside having served the NFI as director and regional vice president is a former president of the National Oyster Institute, and a former director of the National Canners Association. Secretary elected is A. R. Lantz, A. R. Lantz Company, Inc., Los Angeles; and Harvey H. Bundy, Jr., Gorton's of Gloucester, was chosen treasurer. (Mr. Lantz not only won the office of secretary but also won the Convention Golf Tournament.)

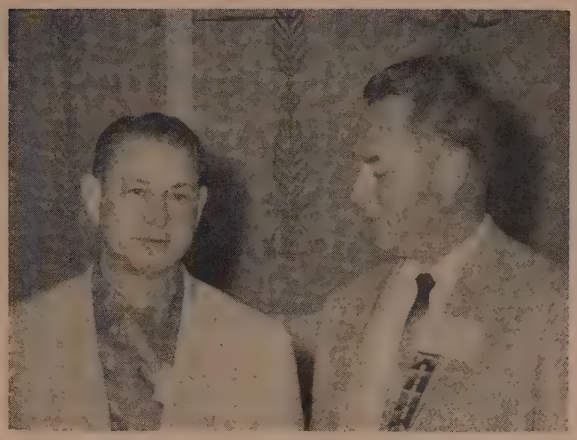
Regional vice presidents chosen were Region 1, Stanley Letson; Region 2, Richard Kulze; Region 3, J. R. Duggan; Region 4, Ray LeMoi of Los Angeles; Region 5, James Pinkerton of Ketchikan, Alaska; Region 6, Bernard Benkovitz. New directors elected by the Southwestern Region 4 included Tom Busalacchi of San Diego, Lloyd Turnacliff, Jr. of Sacramento; John Peterson of San Francisco; Telford McGee of Los Angeles.

The Pacific Northwest Region 5 directors elected included W. C. Eardley, Jr., Seattle, Robert A. Erkins, Buhl, Idaho; Robert Dignon, Seattle; Palmer Olson of Seattle. In addition to those elected, hold-over directors in Region 4 include Joseph Cranic, Jack DeLuca, John Lauc, and Budd Thomas.

Hold-over directors in the Pacific Northwest Region are M. A. Bornstein, John W. McCallum, and Norman Weitkamp.

New officers of National Fisheries Institute elected at NFI's fifteenth annual convention at Miami Beach. Left to right: president, T. D. McGinnes, president of Virginia Seafoods, Irvington, Virginia; secretary, A. R. Lantz, A. R. Lantz Company, Los Angeles; and treasurer, Harvey Bundy Jr., Gorton's of Gloucester.

● The Miami Beach Convention was an active, well attended and thoroughly enjoyable one. It was held at the Fontainebleau Hotel, which had the facilities, the service, and the enterprise to handle perhaps the largest meeting ever held in the American fishing industry in altogether admirable style.



Ray LeMoi, Rayola Co., Los Angeles and James Pinkerton, Ketchikan Cold Storage Co., Ketchikan, respectively the vice presidents newly elected for regions 4 and 5 of the National Fisheries Institute.

Tariff Topic Buried

● The Convention made obvious certain trends and shifts within the National Fisheries Institute. There seemed to be a certain trend and growth in the distributor members and perhaps a lessening of interest on the part of producers.

The troublesome topic of tariffs and imports, which has harassed some previous meetings of the NFI seemed well buried in spite of the current case seeking tariff protection on shrimp and the independent action taken by the Industrial Products Division of the Institute in serving notice that it stood on its right to contest for tariff protecion on fish meal as an independent element of the Institute organization.

This matter of the problems of the fish reduction industry was one of the leading topics in Convention discussion, and will be dealt with in more detail elsewhere in this report.

"All You Need Is Confidence"

● These words, "all you need is confidence" might be called the keynote of the Convention. They were sounded in an address by Dr. Kenneth McFarland of General Motors Corporation.

As always, merchandising was a leading subject and there were notable testimonies to the gains made in the selling of seafood.

One of the most significant statements made was by Sol Geltman, catering manager of the Fontainebleau Hotel when he said: "seafood has a *color* value which gives it importance far exceeding its strict percentage of sales."

A challenge to the industry to extend its consumer education was uttered by Mrs. Caroline Kurtzman, U. S. Bureau of Commercial Fisheries chemist, when she said:

"The fishing industry has a responsibility for consumer education in its own as well as in the public interest." Mrs. Kurtzman cited the discovery that blood cholesterol can be reduced by the use of fish oil in the diet as one of the most significant and promising advances in knowledge of human nutrition. J. Roy Duggan, who was awarded the annual fisheries service trophy, sounded a slogan for the promotion and merchandising effort of the Institute when he proclaimed:

"Sell on *merit*, not on *price*."

He announced that the National Shrimp Breaders Association had embarked during the Convention on a $40,000 promotional campaign which will be handled through the National Fisheries Institute and will be timed to stimulate breaded shrimp sales during the heavy consuming period starting with June 1.

The basic promotion program of the Institute in 1959 was conducted at an expenditure of $90,000, voluntarily contributed by participating members.

Geneva Quietly Considered

● The recent Geneva Conference on the law of the sea was not dealt with in the Convention program. Congress-

AFDOUS Code

What It Is and May Do

The thing called the "AFDOUS code for frozen food handling" was the hottest subject under consideration at the National Fisheries Institute Convention in Miami Beach in May, and the more the American frozen fish trade looked into it the greater its consternation became.

The code, which was produced by the Association of Food and Drug Officials of the United States, which is a trade association of officials and is not an *official* organization at all, would impose arbitrary restrictions on the handling of frozen foods, *all* foods, which were characterized at the Convention in bitterest of terms. Man after man, speaking in the public meeting or discussing the matter in the lobbies, declared that the AFDOUS code was "something we simply cannot live with"; "sure to put us out of business"; "would contribute only harassment and not public health";

● The case for the code was presented by Dr. Vincent E. Stewart, Director, Florida Department of Agriculture, and an earnest advocate of the new doctrine. He emphasized that the code had no *legal* standing at present, but that it has been adopted by the state of Massachusetts and is being urged for adoption by AFDOUS members in other states throughout the country.

● The basic point to which exception was taken by the frozen fish industry in all its phases, production, distribution, retailing, trucking, warehousing, was the requirement that the internal temperature on the inside of a package of fish at all times during all stages of its distribution be at zero Fahrenheit or lower.

Man after man testified at the Convention that there is not now available refrigeration equipment or insulation capable of assuring such a temperature, and that it is not possible to maintain so low a temperature at all stages of distribution. Under the code the only course open to officials in any case when temperature rose above zero in the product or in the air surrounding it would be seizure of the parcel and its retention in custody until such time as laboratory examination had been made and certificate issued as to whether or not its soundness had been impaired.

Pacific Coast members of the NFI were among the leaders in protesting the AFDOUS code and in calling for NFI action to join with other elements in the frozen food business in opposing this code and its extension to the states with every means at their disposal.

At one of the NFI Sessions, from left: Budd Thomas, Eureka Fisheries Inc., Eureka, California; Tom Busalacchi, Union Fish Co., San Diego; Miles Reinke, Wilbur-Ellis Co., Los Angeles; Ray N. Burgess, Jr., Rainier Ice & Storage Co., Seattle; Robert Dignon, Northern Products Corp., Seattle; R. A. Littlefield, Seattle Seafoods, Seattle; Robert A. Erkins, Snake River Trout Co., Buhl, Idaho.

man Thor Tollefson of Washington, ranking Republican member of the House Committee on Merchant Marine and Fisheries, attended the Miami Convention, and was the only person there who had been present at Geneva. Speaking to the Convention he reported that on the basis of the week or more he was able to spend at the Geneva Conference he could report that while the United States delegation's chief interest was in security and our defense posture, it was notable that other nations were chiefly concerned with their fisheries. He said that the United States fishing industry had accepted priority for national security over its own safety; but that the deadlock in which the Conference ended left fisheries in an unimpaired position.

Although the subject of the Geneva Conference was not accorded a position on the program of the Convention, there was much man-to-man and group-to-group discussion of the subject of fishery rights and limits and what should be done in the future.

● Generally expressed opinion seemed to hold that the fisheries had escaped sacrifice at Geneva, but that the industry should insist that the national government press promptly for bilateral or multi-lateral discussions with other nations which would serve to resolve the perplexing and irritant problems which concern the United States fisheries and those of neighboring nations.

There was strong industry feeling that the fisheries had not objected to being offered as a sacrifice in an effort to secure agreement on the tactical narrow territorial sea sought by our defense authorities; (1) that the diplomacy directed to this end had failed and that the subjects of the width of the territorial seas and of the fishing rights of nations should be separated in subsequent discussions; (2) that the Departments of State and Interior now had a moral obligation to proceed forthwith to conferences designed to discuss and resolve the numerous problems complicating our international fisheries relations with other countries.

What's Ahead in Fisheries

● Some interesting glimpses at what the future may hold in fisheries and fishing were given by a number of U. S. Bureau of Commercial Fisheries experts at the NFI Convention. Stewart Springer, Chief of the Fishing Gear Development Section of the BCF, characterized the tuna clipper-to-seiner conversion ground swell as one of the most notable of the present day developments in American fisheries, and attributed it to the development of the Puretic power block, better means of fish location through airplane spotting and electronic instruments, and the development of synthetic fiber nets with their greater strength, longer life and lighter weight. He said: "it all adds up to more fish with less cost in money, men and time." Mr. Springer also said that other nations of the world give more attention than do we in America to the catching of fish, although Americans probably lead in processing and distribution.

More federal voluntary standards of fishery products quality can be anticipated. Ross Leffler, Assistant Secretary of the Interior for Fish & Wildlife, announced that there are now seven such standards applied in 33 plants to the continuous inspection of fish. At least two more standards are in the process of being formalized and the first standard, that on frozen cooked fish sticks, now may be revised in the light of experience gained since its adoption. It was made plain that the application of standards to fish sticks had been an important factor in reversing the downward trend into which this product fell after its early years; so that now the consumption of fish sticks again is on the strong rise.

Southern Californians at the NFI convention, from left: Joseph Cranic, Ocean Garden Products, Inc., San Diego; Leon Goldstein, Terminal Truck Service, Los Angeles; Louis Vitale, Los Angeles Smoking & Curing Co., Los Angeles; Gilbert Kuhn, Ocean Garden Products, Inc., San Diego.

● Harold Allen, Assistant Chief of the BCF Branch of Technology, noted three entrancing possibilities in the longer term, emphasizing:

(1) *Radiation preservation*—Bureau of Commercial Fisheries studies indicate that fish stand first in order of the prospect of applicability of radiation protection of quality and that it is probable fresh fish will be the first food to which this new form of pasteurization becomes applicable.

(2) *Protein concentrates* — ultra-high protein concentrates in the form of fish flour are already being pro-

duced on a pilot plant basis by the Bureau of Commercial Fisheries, with cost figures indicating that on the basis of units of protein and protein quality they can compete economically with such other and much more bulky concentrates as are now being utilized in human and animal nutrition. To be economically feasible, much work and machine development still remains to be done to produce new, different, and better techniques.

(3) *Improved species utilization* — studies are being carried on with promise of success for the development of methods which will permit the better economic use of such fish as Pacific rockfish, New England whiting, Southern mullet, and other food fish which are not now economically profitable for use as foods.

Mr. Allen announced that a food and agricultural organizations international conference on seafoods in nutrition, animal as well as human, would be held in Washington, D. C. in the fall of 1961, an event which he described as of commanding importance and significance to the American fish and seafood industry.

Resolutions Passed

● In addition to the resolution touching on the AFDOUS code for frozen food handling, which will be detailed more fully elsewhere in this issue, the NFI Convention passed a number of minor resolutions. These were:

Providing for continued technological investigations of fresh fish handling methods and a comprehensive research into the relations of time and temperature to the losses of quality in each step in the handling of fresh fish from water to the consumer; calling for a study of the advisability of revising the standards of grades for frozen fried fish sticks; authorizing the Technology Division of the NFI to receive specially contributed funds and regularly budgeted money for specialized investigations in accordance with the contributors instructions; approving the attendance of technological staff members of the NFI at technological conferences of the industry calling on the Food and Drug Administration to adopt the industry's proposed standards of identity for breaded shrimp; the affirming support of the exemption from ICC regulation of motor vehicles transporting fresh and frozen fishery products in interstate and foreign commerce.

International Fish Meal Conference is Proposed

● A government-to-government Conference between the United States and a number of other countries producing fish meal and fish solubles is being proposed by the Industrial Products Division of the National Fisheries Institute as a possible solution to some of the pressing problems of cost and market which are bearing heavily upon the fish reduction industry of the United States and other countries.

The menhaden producers of the United States are taking the lead in this movement, primarily because of the economic distress particularly besetting their branch of the fish by-products business.

There was no secret at the Miami Beach Convention of the National Fisheries Institute that approximately 40 percent of the menhaden fish meal and solubles produced in 1959 is still unsold, and that present prices are substantially below cost of production.

Whereas by the first of March it is normal for about 75 percent of the estimated production of a coming season to have been sold forward, to early May informed students of the menhaden business believe that not a single sale of 1960 production had as yet been consummated.

● It is understood that the Industrial Products Division of the NFI is hopeful that a government-to-government Conference can be arranged between the United States, Peru, Japan, Canada, South Africa, Angola, Denmark, Iceland, Norway and Chile.

They are hopeful that a comprehensive study could be made of the condition of the fisheries resources used for the manufacture of fish meal in order to determine the world potential and any conservation requirements which might be indicated by biological studies.

The Industrial Products Division also feels that a discussion of world marketing problems together with world-wide distribution difficulties, especially for the purpose of developing markets in underdeveloped countries for needed animal protein would be distinctly beneficial.

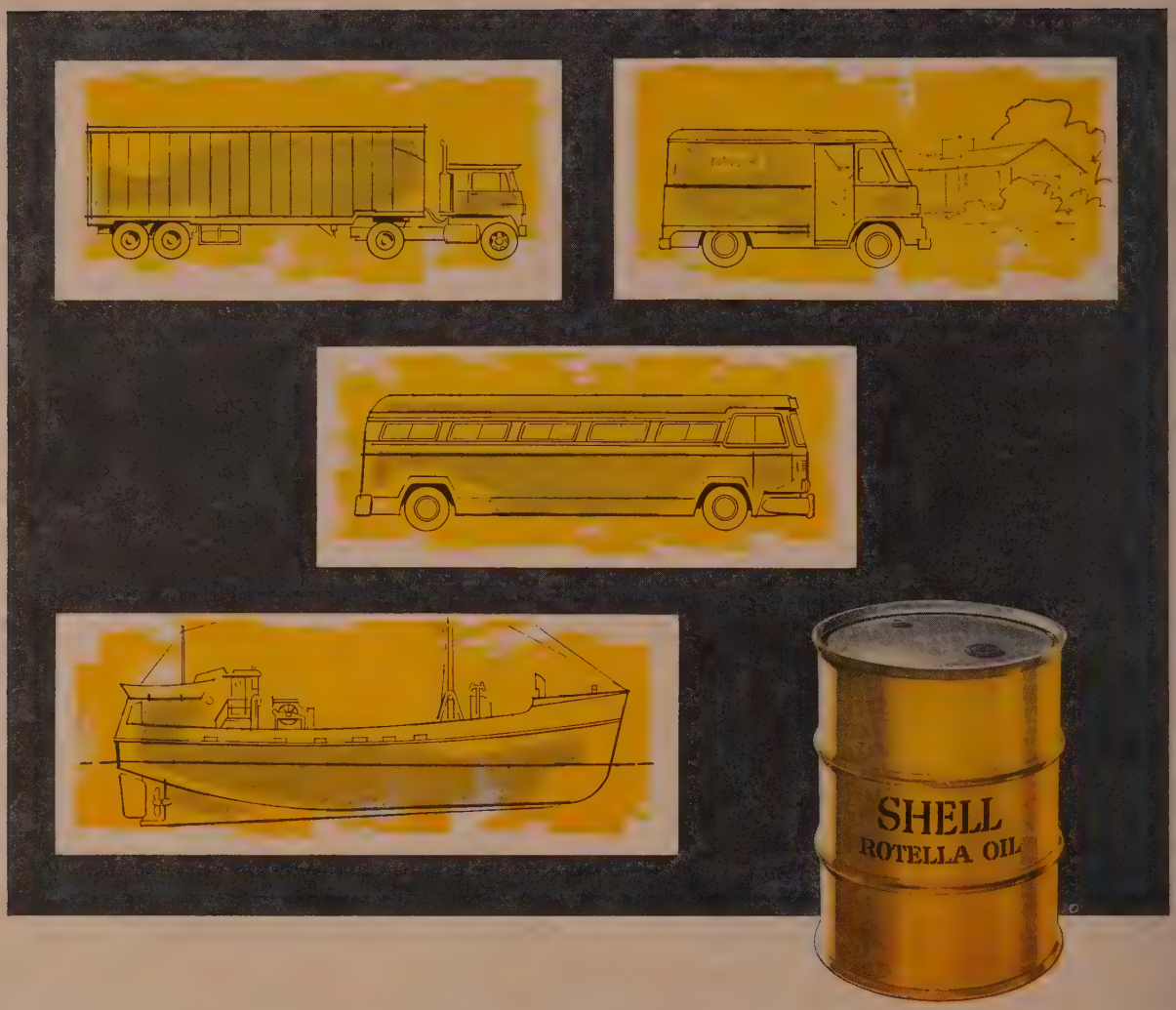
They also feel that such a conference might lead to closer technical study of the possibilities of producing high quality fish meal as human food.

They hope also that such a conference might make it unnecessary for countries which are producing large quantities of fish meal, such as the United States, from being forced to establish trade barriers in order to protect their domestic industry by having countries meet on common ground to discuss mutual problems.

● In looking to the possibilities of such a conference, the Industrial Products Division of the NFI is not unaware of the fact that not long ago a delegation representative of African producers visited Peru with the objective of interesting the Peruvians, whose rocketing rise in fish reduction is blamed for disturbing the economics of the industry, to meet with them in an international discussion of the products of this industry. They are aware also that the proposal was not entertained cordially and that other suggestions for international discussions of the problems involved in the production of fish meals and fish solubles have not been warmly received.

These are world commodities, entering into the trade which involves all feeding concentrates, high protein supplements, and in the related field of fish oils at least the entire world market in oils and fats.

West Coast men at the NFI convention, from left: Norman Weitkamp, Washington Fish & Oyster Co., Seattle; W. C. Eardley, Jr., Whiz-Eardley Fisheries, Seattle; Palmer Olson, New England Fish Co., Seattle; Sam DeLuca, State Fish Co., San Pedro, Calif.; H. W. Branstetter, Crest Importing Co., San Diego.



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PACIFIC Fisherman's NEWS

JUNE
1960

Halibut Catch Generally Higher Than Last Year's

Falling prices and rising tonnages are generally the picture as halibut vessels along the Pacific go into second rounds of production. The larger fleets and larger vessels were getting full loads to Westward despite the heavy concentration of activity there.

In Area 2, the catch declined at the end of the first round of landings, with 7 million pounds compared to 8¼ million pounds at that point last year. This was due to four factors: less landings in northern B. C. camps, reduced Area 2 fleet, shifting of the fleets to Areas 3A and 3B, and rough weather along the coast all the way from Willapa Bay to northern British Columbia during the first round. Some extension beyond the July 8 closure date of last year might be expected in Area 2.

Area 3A more than reversed this trend, with 9¾ million pounds landed compared to 7¾ million after the first round last year. The fleet was larger, joined by several big Canadian vessels and some large U. S. craft; catches were capacity loads on most trips; weather was more average; rate-of-catch was nearly equal the record of 1959, although fishermen reported it fell off a bit faster during the course of first-round trips.

Area 3B produced a total of 5½ million pounds of halibut during the month of April, compared to 3.3 million in 1959. There were more boats both north and south of the Alaska peninsula. Fishing was particularly good considering the number of boats concentrated on relatively small grounds which had been worked heavily last year. A continuing decline in size of fish was noted, indicating utilization of stocks there. Bering Sea catch so far is 4.6 million pounds — more than all last year already. The market doesn't encourage more trips out there, though.

Northern California Has Few Salmon by Mid-May

Very little salmon was being brought into northern California ports as the middle of May approached. High winds at sea had cut down fishing effort to a great extent.

The price was 52¢ per lb. large, 44¢ medium, and 36¢ small, cleaned. What fish were being brought in were of medium size and were coming mostly from Half Moon and Monterey Bay. Very few large salmon were in the catches.

Alaska Operators Make Union Arrangements on Individual Contracts

Alaska operators this year are completing negotiations with Alaska Fishermen's Union with representation mainly through either W. C. Arnold or Walter Sharpe, each representing a group of individual operating forms who then sign their own contracts. They formerly dealt in a body through Alaska Salmon Industries, Inc., but that management association disbanded at the start of this year.

Individual arrangements through the same representation have been made with the machinists, shipwrights, and cannery workers' unions.

Salmon Trolling Looks Murky All Along the Pacific

● The trolling picture was not encouraging from any point of the Pacific Coast as the end of May approached. Weather conditions continued to hamper production, and where ample signs of feed for salmon were evident, the Kings themselves were not.

The pattern appeared the same from Alaska down through Oregon. Columbia River escapement in April and early May was slightly better than last year, but at this writing the catch appeared to be about 30% below last year at the same time there. The Washington coast was hard hit, and even in Alaska the production of Kings appeared less than sufficient to satisfy the fresh market. Little mild-cure production was reported from there as yet.

Prices were higher, in view of the scarcity on the fresh market everywhere, and the grade of fish is reported to be high. There did not appear to be the threat of warm water sending the fish deep as it did last year.

● Tidal wave caused by the Chilean earthquake late in May had its own special adverse effect on trolling everywhere on the Coast. The huge swell muddied waters everywhere, and its effects on feed, water temperature and fish movements might take a month to determine fully. One result observed at once was that the murky waters made it hard for the fish to see the lures.

Bodega Bay Boat Owners Form Marketing Group

The fishing boat owners and interests of Western Sonoma County, Calif., have recently organized into a group called "The Fisherman's Marketing Association, Incorporated, of Bodega Bay."

Officers and directors elected are as follows: President, Earl Carpenter, boat *Maria II;* Vice Pres., Paul Wedel, boat *Eva U.;* Sec., Harold Ames, Jr., boat *Robert Croll;* Treasurer, Andy J. Brown, Sr., boat *Ann L.;* S.S. "Lefty" Darling, boat *Acme;* Peter Cucchi, boat *Baby Anna;* Leon Mason, boat *Nine Belles;* J. S. Respini, boat *Nautie Gal;* Tom Burke, boat *Somona Ann;* Calvin Armstrong, boat *Verna A.;* and Louis Saare, boat *Renbob.*

Sam Ivicevich

A patriarch of the San Pedro fishing community passed from the scene of his labors recently when Sam Ivicevich, 84 years old,. a retired fisherman, died in the port city. Mr. Ivicevich was born in what is now Yugoslavia, and had lived in San Pedro 30 years. He leaves his widow, one brother and two sisters.

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Fort Bragg Items

Bill West, manager of the Fort Bragg operations, Meredith Fish Co., reports a good shrimp season. Fishermen were getting paid 10¢ per-lb. for shrimp. Fishing for Meredith was *Faymar,* Bodega Bay, skippered by Max Carlson.

A new elcetric fish hoist has been installed at the Meredith dock.

Bud, a troller, formerly owned by Howard Makey, Fort Bragg, has been sold to R. Brodehl of the same port.

John Jackovak has sold his troller Jackie to Guy C. Bell, Chico. *Janie J.,* formerly owned by Victor Leonard, Fort Bragg, has been sold to Harold H. Tuer, same port.

W. C. Stead, Fort Bragg, has sold his troller *Skipjack* to William Pavioni, also of Fort Bragg. *President,* a troller formerly owned by William T. Marler, Fort Bragg, has been sold to Jerry Martin of the same port.

Robert L. Cox, Fort Bragg, former owner of the *Delta Pride,* has purchased the troller *Norcoaster* at Newport, Ore. Alvin Stanley, Fort Bragg has bought Jim Barnes' troller *Ola B.*

Elmer Jone, Fort Bragg, has repowered his troller with a GM 4-51 marine diesel engine, purchased from West Coast Engine & Machine Works, Fort Bragg. The engine is equipped with a 3-1 reverse and reduction gear.

Princess, a Fort Bragg troller owned by Carl Roman, has been repowered with a rebuilt GM 6-71 purchased from and installed by West Coast Engine & Machine Works.

Don Koski, Fort Bragg, has put a rebuilt GM 3-71 marine diesel engine from West Coast Engine & Machine Works in his troller. The engine has a 2-1 reverse and reduction gear.

Alf Anderson, Eureka, had West Coast Engine & Machine Works, Fort Bragg, install one of their rebuilt GM 3-71 marine diesel engines, in his troller *Rose Ann.*

A. Paladini, Inc., Fort Bragg, is remodeling its fillet line, according to Louis Cavalini, manager. Self feeders are being installed, and more automation is being added where possible.

An additional 25 h.p. boiler has been installed in the plant.

Mr. Cavalini also reported that shrimp fishing had been good, and the quota of 250,000-lbs. for the district would probably be filled by June 1. The count was running from 80 to 180 to the pound.

Fishing shrimp for Paladini were the trawlers *Buena Ventura, Novo Star,* and *Moray.*

Makela Bros., Fort Bragg boat builders and fishermen, have been busy recently rebuilding the 42′ troller *Audrey,* owned by John Figuerido. They raised the freeboard 14″, put in new deck house, new deck, etc. *Condor,* their own troller, was given a longer deck house.

Francis Ferber, Moss Landing, had Makela Bros. add 10′ to the boat's length in the middle. Darrell Ferber, Eureka, had Makela Bros. put new bulwarks on his troller *Sea Home.*

Harold Ames Jr., Bodega Bay, has commissioned Makela Bros. to build him a 50′ combination trawler, troller and crab boat. Mr. Ames now fishes the *Robert Crowe.*

F. Alioto Fish Co., Fort Bragg, had four shrimpers working for them, according to Tony Tarantino, manager. They were *Donna, Verona, Lawrence,* and *Seal.*

Noyo River Fish Co., Fort Bragg, has put in a 94′ wharf, replacing one badly damaged by a storm last winter.

Manuel Figuerido, owner and skipper of the dragger *Novo Star,* fished for shrimp this season. He also put in a dock across the Noyo River from A. Paladini Inc., to moor his boat to.

Frank Barcot Passes

Frank Barcot, a retired fisherman himself, and father of fishermen, died last month in San Pedro, where he had made his home for 40 years. Born in Dalmatia, now a part of Yugoslavia, Mr. Barcot lived in the Pacific Northwest before coming to San Pedro. He was a member of the Eagle Lodge of Everett, Wash., and leaves five sons living in the state of Washington, besides Tony Barcot, another son, of San Pedro. Besides his sons, he is survived by his widow, two daughters, two sisters, one brother, 19 grandchildren and four great grandchildren.

Monterey Seiners Make Plans to Revive Industry

● Monterey canners and sardine fishermen got together at a dinner meeting in April to see what they could do about perking up what's left of Monterey's ailing sardine industry.

Representatives of the canneries were guests of the resurrected Monterey Purse Seiners Association, the boat owners group. Monterey Mayor Shedo "Buck" Russo was guest of honor.

President Anthony Lucido of the purse seiners said the purpose of the meeting was to lay groundwork for fishermen to "deal with the canners on a more amicable basis and try to get this business back on its feet."

Sparked by the reappearance of increasing numbers of sardines in Monterey waters the past two seasons after nearly a decade of practically no sardines at all, the long inactive purse seine association was revived recently.

Mr. Lucido said that the boat owners and canners discussed a possible nation-wide advertising campaign to build up a bigger market for Monterey Bay sardines in the United States. If undertaken, the program would probably be sponsored jointly by canners and purse seine operators. No definite plans have been made so far.

Cannery representatives who attended the meeting were: Phelps Hollywood, Carmel Canning Co., Thomas Noice and David McCafferty, California Packing Corp., Sebastian "Buster" Sollecito, Enterprise Packers, Bob Woods, Hovden Food Products Corp., and James A. Davi, J. D. Packing Co., San Francisco.

Representing the boat owners were: Mr. Lucido, Neno Davi, vice-president, Erasimo Aiello, secretary-treasurer; and directors, Horace Balbo, John Mineo, John Spadaro, and John Russo.

"Laura S.," "Angelo D." Receive Tasco Fords

Sam Sabella, San Francisco, has repowered his troller and crab boat *Laura S.* with a Tasco Ford four cylinder marine diesel engine, sold by, and installed by Boicelli & Mercury, Fishermen's Wharf, San Francisco. The engine was equipped with 2-1 Capitol reduction and reverse gear.

Another Tasco Ford four cylinder marine diesel engine went into the troller of B. D'angelo, the *Angelo D.*

Interior of hold shows chiller unit.

Fresh market snapped up these early Kings.

Newly-Refrigerated THEO E. Hauls Fresh Alaska Salmon to Seattle

● With early King salmon in acute shortage in the Seattle fresh markets this spring, a welcome innovation brought fresh, gillnet-caught Kings direct from the Taku-Stephens Pass area of Alaska. They arrived at the Seattle markets in prime condition thanks to the effective operation of chilled seawater tanks in the recently-converted *Neptune,* and aboard the *Theo E.,* which was converted to refrigerated seawater just in time to make a first round trip between Seattle and Alaska, right on the *Neptune's* heels.

Both ships are at this writing completing second round trips for the fresh Kings, still in sharp demand as the more local trolling continues slow.

Norman Holm, owner-operator of these ships among a fleet of buyer vessels in Alaska, considers the Alaska-Seattle shipment of fresh salmon to have great promise. For his operation supplying fish for Excursion Inlet Packing Co., the chilled-seawater method offers many advantages in addition to his opportunity at the moment with brokers of fresh salmon. It means more versatile use of his vessels, more time to handle the various kinds of fish (and less handling necessary), a greater area for their operation, more production per boat, reduced labor cost, and elimination of icing costs.

In summer operation last year with the *Neptune,* he was able to send that buying vessel ranging to fishermen over a 350-mile area from cannery; he expects similar results this season with the newly-converted *Theo E.,* when both vessels shift to operation within Alaska.

● Mr. Holm can claim another important "first," for the Puget Sound area at least, in the conversion of *Theo E.* This ship is the first one in that area to use welded-aluminum brine tanks for the refrigerated holding process. The tanks are built of material supplied by Aluminum Company of America, the sheet metal being Alcoa's alloy No. 5086 H34. This magnesium-aluminum alloy presents several advantages over steel tanks, having more corrosion resistance, sanitation advantages, less weight, easier installation and less maintenance.

The 76′ by 19′ *Theo E.* was repowered last year by N C Marine, Seattle, with a Caterpillar D342C marine diesel, 220 hp cont. at 1225 rpm with 3½:1 Capitol reduction. Her outfit was further improved just recently

THEO E. has her hold fitted with aluminum tanks for chilled brine.

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M/V Olympia's Captain Thomas Scola (left) says, "In our kind of fishing we're out three or four days at a time, with the engine running almost constantly. In spite of this, RPM DELO Oil keeps it clean, and our oil consumption is less, too." M/V Olympia (right) fishes for whiting in summer, haddock and cod in winter.

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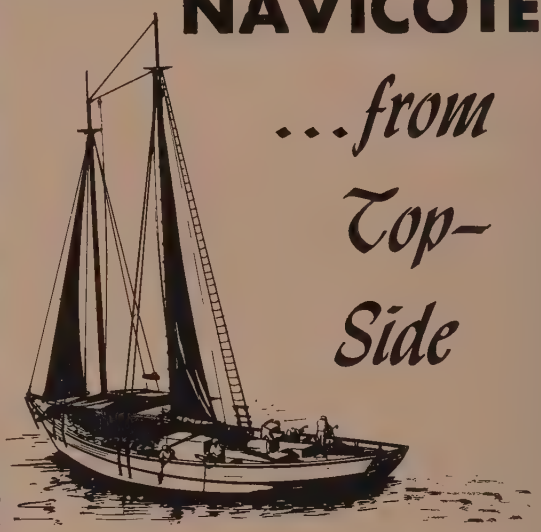

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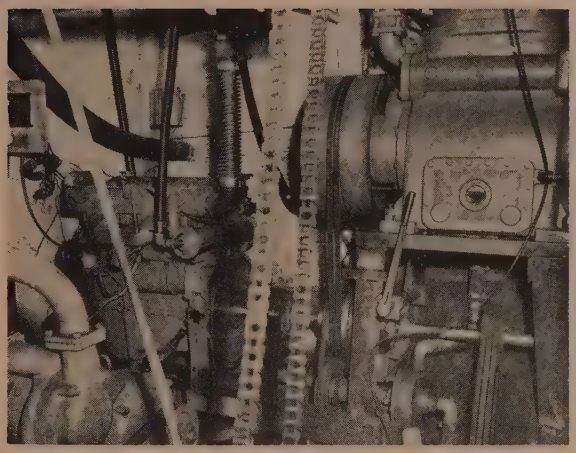
with the addition of a new Raytheon 12-mile radar unit. She went to West Coast Marine, Seattle, this spring for the installation of her aluminum brine tanks, which were set within the form of the original hold. The built-in tanks were arranged with a ventilation space to protect the wooden hull from dry rot, and the addition of a piping system to spray oil behind the tanks for further treatment of the wood.



Vilter compressor is belt-driven from a Western Ford diesel.

● W. E. Stone & Co., Seattle, handled the work of engineering the refrigeration system. It incorporates a Western Ford auxiliary diesel in the engine room, portside, with belt drive to power a 2-cyl. Vilter type VMC model A432 ammonia compressor for the refrigerant. A double-pump piping system circulates the sea water in two tanks, keeping up a constant exchange of water. It is possible to convert the refrigerating operation for handling fresh crab and other seafoods.

The chiller unit, a "Port-a-Chiller" built by W. E. Stone & Co., is located right in the main tank itself. The Port-a-Chiller is galvanized inside and out, and the apparatus is regulated to provide constant 29-degree temperature with only a single degree tolerance, half a degree either way. It can bring a full cargo down to this temperature within 14 hours. Hold capacity is 150,000 pounds for *Theo E.*, although she has not carried that volume as yet.

Aluminum fish hold conversion was done by these men (l-r): Duke Short, skipper of Otter; Neil Wulff, engineer of Theo E; Harvey Whitaker, who did sheet metal work; Norman Holm, who developed the idea; Dick Hunton, of West Coast Marine, whose facilities were used for some of the job; and Dan Wagner. Jim Brown, skipper of Theo E, not in photo.

Her fresh salmon cargo was sped to Seattle in much lighter volume on her first runs, but the load will of course increase from here on through the season.

From nine to eleven fish buying operations are managed by Mr. Holm during the peak of the season in Southeast Alaska. Other vessels, besides the *Neptune* and *Theo E.*, are the *Otter, Apex No.* 1, *Rio de Oro, New Venture, Ellowa* and *Haven*, plus chartered packers.

The *Neptune*, 78' by 19' with a capacity of 125,000 pounds, was brined last year, and in 1958 she was repowered by N C Marine with a 300-hp D375 Cat, using 3:1 Twin Disc.

● A third ship in the fleet, due for conversion to refrigerated brine immediately for the coming season, is the Otter, a power scow which will be fitted with Alcoa aluminum tanks of 75-ton capacity like the *Theo E.* Work on the *Otter* is just beginning. Tanks will be fabricated by Flohr & Co. Metal Fabricators, Inc., Seattle. W. E. Stone & Co. will handle the refrigeration work again. A new twist in this case will be the design of portable tanks on the deck of the power barge, their aluminum construction making them light and easy to transfer to other vessels.

All of the refrigeration machinery will be in one compact unit, placed topside on the main deck and mounted on skids for rapid transfer to other vessels or shore operations. Nothing will be permanently attached to the vessel itself. An element of containerization could thus be achieved eventually, sttting a possible pattern for developments far into the future of the fishing industry.

Flohr & Co. hydraulically operated fish elevators on the *Neptune, Theo E.*, and coming on the *Otter* permit unloading at any cannery and also allow transfer loading from other tenders at way-points.

Two other scows in the fleet, the *New Venture* and *Ellowa,* are candidates for possible conversion to chilled seawater at a later date, thus continuing toward the development of a fleet of refrigerated vessels.

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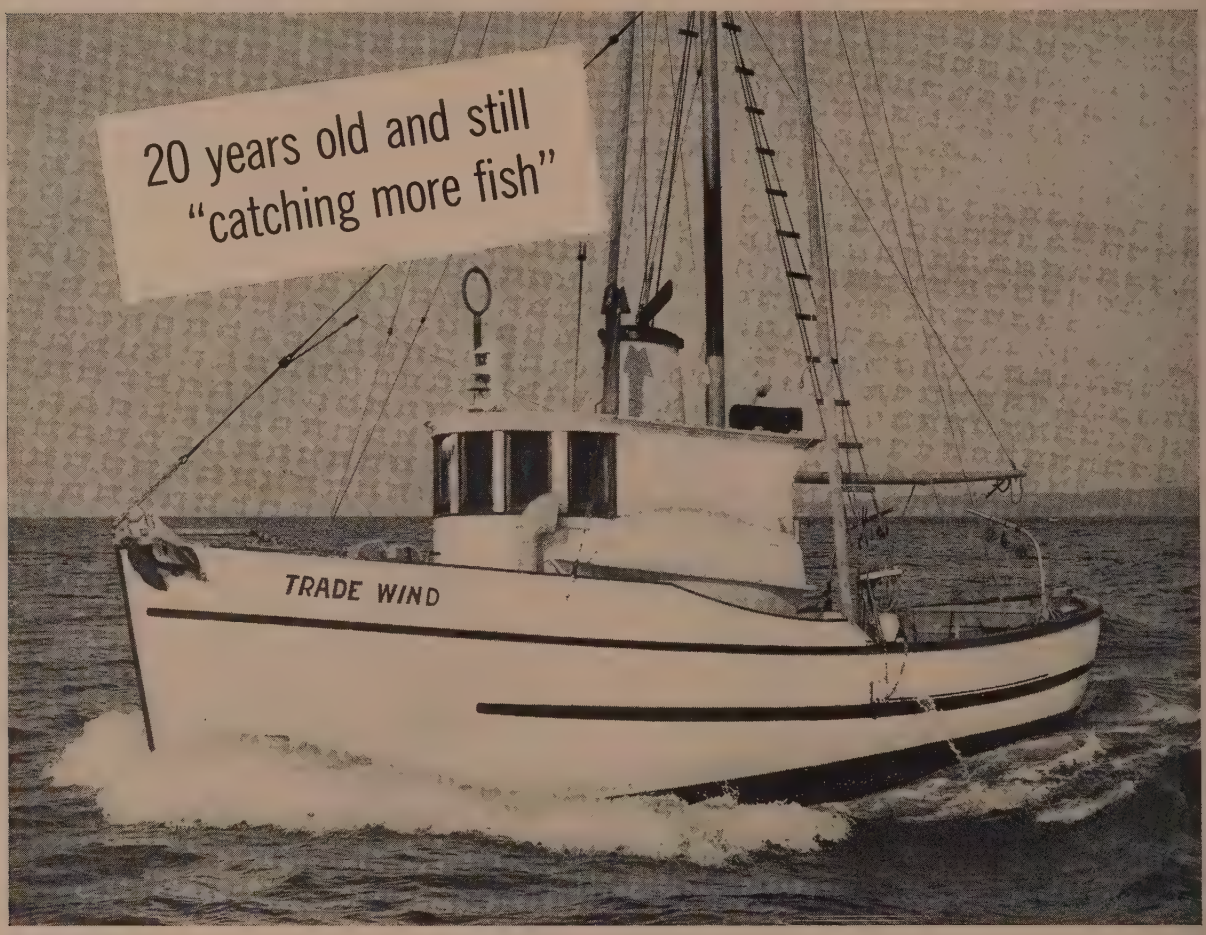

Seattle's Oscar Iversen, owner of the salmon troller TRADE WIND, is an old hand at the fishing game—knows from experience the difference an engine can make in a boat's profits during a season.

Get him talking about the GM Diesel that powers his 43-foot boat and here's what he'll tell you: "I've caught more fish with my GM Diesel season after season because I haven't lost any fishing time due to engine trouble in 11 years. In my opinion, a GM Diesel permits *any* trolling boat owner to enjoy the maximum fishing time, simply because it's so reliable."

And he backs up his opinion with facts—like, for instance, the fact that he ran his 3-71 "Jimmy" for eight straight years before overhaul. And even then, the overhaul wasn't really needed—"I simply had the overhaul because I wanted to keep the engine running okay," says Iversen.

The TRADE WIND's GM Diesel is 20 years old—12 years since it was overhauled—and still has the power to save time getting to the grounds and back. Also the ability to idle down for trolling without fouling up. That's the kind of power you need in your boat to make extra money. Interested? Call your GM Diesel distributor—he's in the Yellow Pages under "Engines, Diesel"—or write direct for more information.

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The Conversion Parade Becomes a Rush

In the March 1960 issue, PACIFIC FISHERMAN published a list of former tuna clippers converted to purse seiners. The list then numbered 37 vessels at that time converted or definitely to be converted. Below, PACIFIC FISHERMAN attempts to bring the conversion list up to date. PACIFIC FISHERMAN gratefully acknowledges the help of the Inter-American Tropical Tuna Commission in compiling this list, as well as the co-operation of the managements of the various shipyards, and the owners of the vessels.

Vessel	Managing Owner	Length in Feet	Built by	Converted by
American Boy	Joaquim Canas	124	Lynch	Fellows & Stewart
American Queen	Van Camp Sea Food Co.	144	Western	Undetermined
Antoinette B	Ed. X. Madruga	121	National	Harbor Boat & Yacht Co.
Azoreana	M. G. Rosa	142	Campbell Machine	National Steel
Belle of Portugal	M. G. Rosa	130	Campbell Machine	National Steel
Cabrillo	Joe Soares	127	National Steel	Campbell Machine
Cape Beverly	J. M. Martinac	113	Martinac	Martinac
Cape Falcon	Sverre Jangaard	128	Harbor	Campbell Machine
Chicken of the Sea	Van Camp Sea Food Co.	142	Birchfield	Fellows & Stewart
Coimbra	Van Camp Sea Food Co.	136	Western	San Diego Marine
Commander	Al Davis	126	Birchfield	Harbor Boat & Yacht Co.
Commodore	Louis Vattuone	130	Campbell Machine	Campbell Machine
Constitution	J. S. Rogers	150	Campbell Machine	Campbell Machine
Conte Bianco	National Marine	127	National Steel	National Steel
Corsair	Morgan	128	Chioman	Harbor Boat & Yacht Co.
Crusader	J. G. Cardosa	105	Puget Sound	San Diego Marine
Determined	Star-Kist Foods Inc.	122	Avondale	Campbell Machine
Dominator	George Soares	127	National	Campbell Machine Inc.
Ecuador	M. O. Medina	133	National Steel	National Steel
Elsinore	National Marine	127	National Steel	National Steel
Endeavor	Wade Ambrose	143	Campbell Machine	Campbell Machine Inc.
Equator	M. O. Medina	133	National Steel	National Steel
Espirito Santo	F. Perry	138	Soule	Fellows & Stewart
Historic	M. O. Virissimo		Martinac	Fellows & Stewart
Jeanne Lynn	G. W. Martin	122	Tacoma	Fellows & Stewart
Jo Linda	Luigi Guidi	130	Avondale	National Steel
Liberty	Ed X. Madruga	100	Puget Sound	Campbell Machine Inc.
Liberty Bell	F. H. Gonsalves Jr.	112	Hodgson	Campbell Machine Inc.
Lou Jean	Louis Guidi	106	Consolidated	National Steel
Lusitania	Manuel G. Rosa	98	Al Larson	San Diego Marine
Mary Lou	Maurice Bernardini	118	Lynch	Harbor Boat & Yacht Co.
Mary S	Lewis Livesley	110	Martinac	Martinac
May Queen	Star-Kist Foods	121	Puget Sound	Harbor Boat Building Co.
Mercury	Harbor Boat & Yacht Co.	108	Tacoma	Harbor Boat & Yacht Co.
Navigator	Joe Rogers	145	Campbell	Campbell Machine Inc.
Normandie	M. O. Medina	160	Campbell	Campbell Machine Inc.
Paramount	Joe Madruga	132	Avondale	Al Larson Boat Shop
Portuguesa	Manuel G. Rosa	113	Lynch	Diesel Technical Service
Renown	Lewis Livesley	126	Hodgson	Fellows & Stewart
Ruthie B.	Star-Kist Foods Inc.	106	National	Harbor Boat & Yacht Co.
St. Mathews	(Eight San Pedro Fisherman)	128		Harbor Boat Building Co.
San Joaquin	Fernando Medina	128		Diesel Technical Service
Santa Helena	Van Camp Sea Food Co.	121	Avondale	Fellows & Stewart
Santa Rosa	Anthony Bozanich	128	Harbor B&Y	Campbell Machine Inc.
Saratoga	Manuel Luz	121	Tacoma	Campbell Machine Inc.
Seafarer	Al Davis		Birchfield	Harbor Boat & Yacht Co.
Sea Preme	National Marine Terminal	127	National Steel	National Steel
South Coast	So. Calif. Fishing Co.	115	Western	Campbell Machine Inc.
Southern Pacific	Lou Brito	123	Martinac	Al Larson Boat Shop
Southern Queen	John Rippo	110	Tacoma	Diesel Technical Service
Starcrest	George Soares	110	San Diego M.	Diesel Technical Service
Sun Europa	Sam Crivello	150	Martinolich	Fellows & Stewart
Sun Jason	National Marine Terminal	130	Avondale	National Steel
Sun King	Star-Kist Foods Inc.	112	Tacoma	Campbell Machine Inc.
Valiant	Cal Marine Curing	108	Martinac	Harbor Boat & Yacht Co.
West Point	Carl Hanken	112	Tacoma	Harbor Boat & Yacht Co.
White Star	Van Camp Sea Food Co.	138		Fellows & Stewart

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For greater sales and profits put Canco's research, manufacturing facilities and aggressive marketing team to work for your products.

GREAT CONTAINER IDEAS COME FROM CANCO

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Make-Do at Manta

Ingenuity Essential to Fishing On Ecuador's Equatorial Coast

● Manta is the second biggest fishing port in Ecuador, second only to Guayaquil, which supports a sizable shrimping industry. The people of Ecuador were fishing in the Pacific long before Europeans even knew the land existed, and in recent years commercial fishing has become an important industry with the introduction of modern industrial methods of catching and canning fish.

There is a small but modern and efficient cannery packing tuna principally, in Manta, owned by Inepaca, an affiliate of Van Camp Sea Food Co. (Inepaca is short for Industria Ecuatoriana Productora de Alimentos, Compania Anonima, which means Ecuadorian Food Production Industry, Inc.) Supplying the cannery is a fleet of small tuna clippers, and in consequence Manta also has a ship-repairing industry of sorts.

Since the people of Manta are traditionally fond of fish, there is also a fresh-fish industry.

Modern mechanical methods are only just being introduced, and a great deal of the work of the Ecuadorian fishing industry is done by hand.

Sheryl is a typical Manta fishing vessel supplying the canning industry. Owned by Walter Gillis, of Long Beach, Calif., *Sheryl* is the first fishing vessel out of Manta ever to carry refrigeration aboard. Her skipper is Bob Carpenter, a young, aggressive, forward-looking fisherman who believes that the fishing vessel of the future is one that can operate both as a seiner and a bait boat. He has definite ideas on how such a boat can be built and worked.

Sheryl is, obviously, the only boat out of Manta that can make extended fishing trips, bringing back her load in a hold refrigerated by up-to-date mechanical means. She is 65′ long by 18′ beam and carries around 50 tons of refrigerated fish.

Sheryl's propulsion power comes from a Caterpillar D-17000 135-hp. engine, and her auxiliary is a Caterpillar 38-hp engine. Compressors are Kohlenberger 4-by-4, and she has a spray refrigeration system.

Mr. Carpenter's ship carries an all-nylon net made in Peru and supplied by Textil Maritima, Lima. She has a monel propeller shaft, and Goodrich cutless bearings.

Another clipper of the same size, the *Cora Ann,* also brings fish to the Inepaca cannery; and although she is as well equipped as the *Sheryl* in other respects, she is not yet equipped with refrigeration.

Launching Problems

Ciudad de Manta, a Manta fishing boat, recently required repairs, which were carried out on the beach, the boat being raised on a low trestle. When she was ready to re-float, the skipper waited for a good high tide, then gathered as many workers as he could, both professional and amateur, and dragged the vessel by main force out into the water.

The operation took some skill, and a lot of manpower.

It might be remarked that the beach at Manta is the principal thoroughfare between one part of the town and the other—the northern part being residential, while the southern part contains all the retail business plus considerable downtown residential territory.

The beach, when the tide is low, carries quite a flow of traffic of all kinds—pedestrian, equestrian (burro mostly) and automobile. When the tide is high, traffic necessarily is interrupted; so there wasn't much activity to interfere with re-launching the *Ciudad,* since this was done at high tide. The vessel is owned and operated by Sr. Dionisio Chopitea, of Manta, and fishes for the Inepaca cannery.

Typical fresh-fishing operation at Manta is carried out by a beach seine team consisting of two skiffs and a shore-side crew.

The net is set by the two skiffs working perhaps 100 or 200 yards from shore, then hauled in by the people ashore. When the catch is in, all the participants, plus any other prospective customers that may be attracted to the site, buy the fish on the spot. Beach seine catches are pretty well mixed, containing shrimp and other sea foods as well as finny fish.

A fleet of sail-driven cargo boats ply up and down the coast between Manta and neighboring seaside towns and villages. Highway communication being pretty sketchy on the shore side, a great deal of the freight and many of the passengers that move from one town to another travel by sea, aboard these gaff-rigged cutters.

With heavy loads and light winds, these sailing vessels carry a tremendous amount of canvas. Both the bowsprit forward and the main boom aft overhang the hull by almost the length of the hull itself.

● A project for building a new pier at Manta is contemplated with hope by all elements of the fishing industry. The Ecuadorian Government, recognizing the present importance and bright potential future of commercial fishing, has a project officially under way for building a modern pier. This future facility will bring not only efficiency and economy, but order and stability to the promising fishing industry of Ecuador.

That Booming Peruvian Fish-Meal Business!

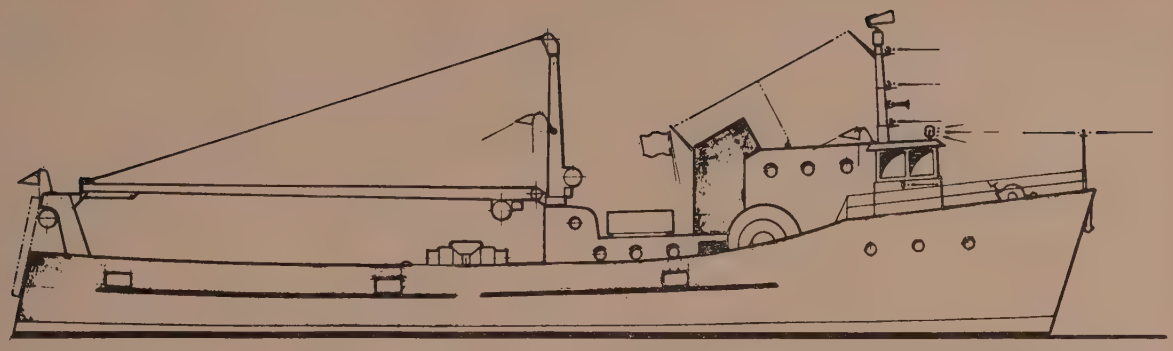
Peru's exports of fish-meal for 1959 probably were more than twice 1958's, and her exports of fish-oil were probably ten times the previous year's, according to estimates by the US Department of Agriculture, quoted in the Bureau of Commercial Fisheries' Market News Report.

According to the USDA estimates, Peru exported 270,000 short tons of meal in 1959, compared with 116,598 short tons the previous year. The oil exports are estimated at 18,000 short tons for 1959, 1,811 tons for 1958.

The jump in oil exports was due, it was said, to the Government's changing the cost-of-production rate in computing the export tax charged against Peruvian exporters of oil. This cost figure stood for 15 years at 460 soles (US $16.60) per ton, but last year it was boosted to 3,000 soles (US $108), bringing about a sharp decrease in the tax per exported ton.

In 1958, The Netherlands was the leading importer of Peruvian fish-meal, but the US was not a bad second. The Dutch figure was 36,295 short tons as against 30,590 for the US. The Netherlands also led in importing Peruvian fish oil, buying 616 tons, Italy running a close second with 602.

The meal and oil industry in Peru got quite a stimulus last year when the Government lifted restrictions on new plants and new equipment, having officially found that the anchovy resource from which the products are developed has not been diminished.



The Trawler of Tomorrow? Here's an 84-footer designed for the advantage of stern-chute dragging, with ready convertibility to purse seining.

Two Pacific Trawlers Designed And Timed to Tomorrow's Trend

By
DAYTON L. ALVERSON
and
PETER G. SCHMIDT Jr.

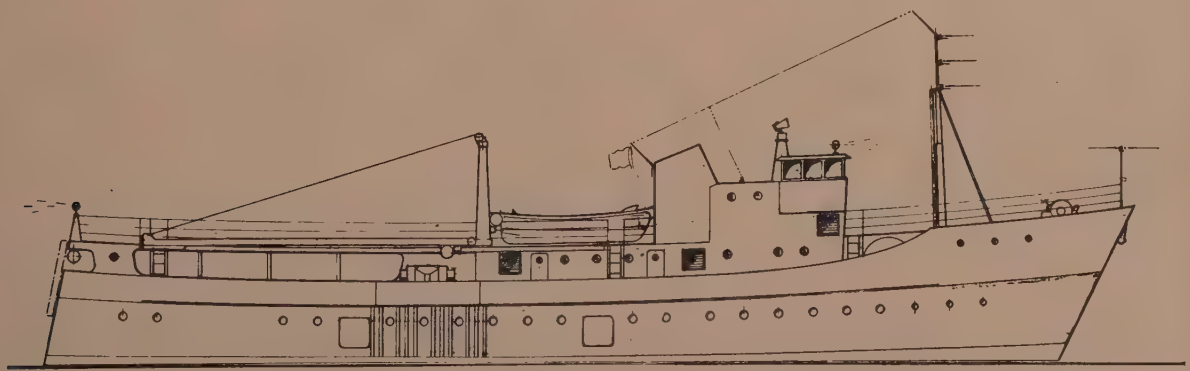
● The history of Pacific Northwest trawling indicates that the characteristics of the contemporary fleet and its operation were influenced by (1) the nationalities involved, (2) the production limits manifested by markets (3) the features of the trawling grounds within the area exploited, and (4) the subordinate position of the trawl industry to other more lucrative fisheries.

NOTE—Mr. Alverson is Base Director, Exploratory Fishing Gear and Research Base, Bureau of Commercial Fisheries, U. S. Fish and Wildlife Service, Seattle. Mr. Schmidt is president of Marine Construction and Design Co., Seattle.

The influence of the early Italian and possibly Spanish fishermen is seen in the typical Pacific trawler, which uses davits placed on either side of the stern in contrast to the Atlantic seaboard method of setting, towing, and hauling from davits on one side (generally starboard) of the trawler. The use of small vessels, converted seiners, trollers, and halibut schooners has probably persisted because these vessels have been adequate to supply market demands and as they could be converted back to other fisheries when they appeared more profitable. The relatively narrow continental shelf has made it possible for small trawlers to quickly seek shelter when storms occur in the fishing areas. The many small ports along the coast have also reduced the necessity of vessels making long runs to the fishing banks. These factors: short runs, limited markets, and absence of extensive offshore trawl grounds have been responsible for the retention of the small-boat fishery and have precluded the development of the large ocean or "distant" trawler characteristic of the North Atlantic.

Disadvantages of Small-boat Fleet

● Although the small-boat fishery has generally been satisfactory with respect to most coastal operations, it has resulted in some disadvantages to



Stern-Chute, Offset-House 127' trawler designed to fish any banks of Pacific North America, while readiiy convertible to tuna seining.

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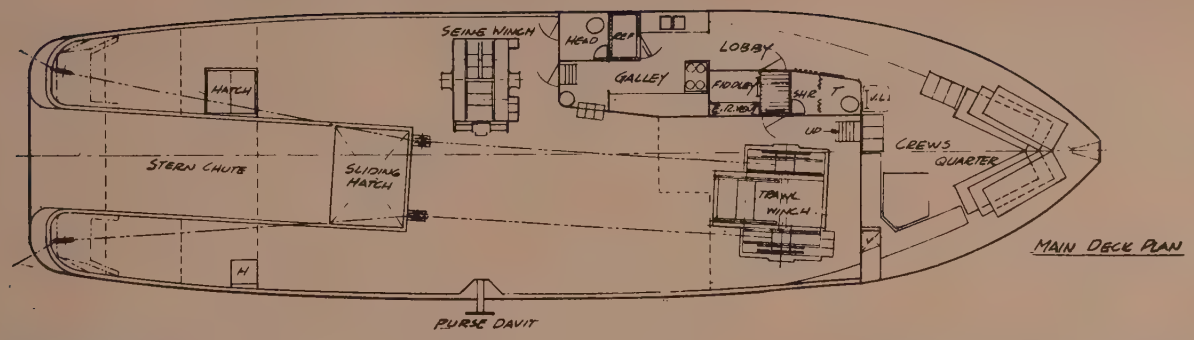


Maximum deck space, with net handling and fish handling reduced to a minimum features this design. The stern chute is filled-in for seining.

Puget Sound trawlers. These vessels generally make longer trips and runs than vessels operating from coastal ports. The expansion of the fishery to northern Vancouver Island and Hecate Strait has resulted in trips averaging from 8 to 11 days each and runs up to 500 miles. Fishing in Hecate Strait has been possible because increased yield per fishing effort has exceeded increased operating costs. The small vessel size and relatively small capacity of these vessels, coupled with slow running speeds (about 9 knots), has however reduced their ability to obtain maximum benefits from the more productive distant grounds.

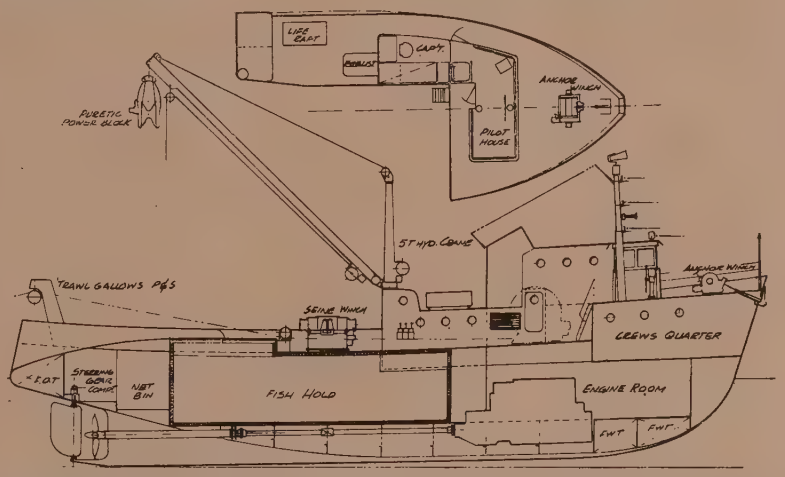
A factor which may further reduce their effectiveness lies in the recent development of territorial sea problems. The present discussions in Geneva may possibly result in displacement of some coastal fisheries working inshore waters.

If this should come about with respect to the Pacific Northwest trawl fishery the fleet would need to intensify exploitation of the species inhabiting deeper waters along the continental shelf or to expand the geographic range of the fisheries, perhaps to the unexploited areas of the Gulf of Alaska, where some large untrawled banks exist between Cape Spencer and Kodiak Island, Alaska.

Factors in Gear Handling

● As Pacific trawlers are relatively small vessels and carry small crews of three to five men, handling of the net is facilitated by lifting or strapping wings, body, intermediate, and cod end of the net aboard in successive lifts using the boom and winch power. As no rollers (bobbins) are used by U. S. west coast vessels, this method is relatively safe during average weather conditions. It is, however, a handicap during squalls or storm periods and may result in loss of fishing time.

This handicap has been partially overcome with the advent of the drum trawler. These vessels are seiners which have been installed with power drums to haul or wind in the wings and body of the net. Drum trawling eliminates the necessity of making the successive lifts of the net, as only the cod end is brought to the starboard side and lifted aboard.



Functional design is a primary consideration in seeking maximum capability with speed of fishing as well as running, and quick convertibility to seining or King crabbing. Fo'c'sle deck insert shows the skipper's 315° angle of view.

Suggested Future Trawlers

● After reviewing the possible future course of trawling in the Pacific Northwest, we feel that two design considerations are warranted:

(1) a vessel capable of efficiently exploiting grounds currently fished, and

(2) a vessel capable of conducting trawling in the Gulf of Alaska and the Bering Sea.

If future trawling activities require greater offshore operation, the "seability" and ability to fish in relatively rough seas will be of considerable importance. For the local fishery, alteration of design and deck equipment may be adequate. A plan for utilizing the drum trawl and stern chute would be advisable. This method could be improved by shifting the drum forward and utilizing a chute arrangement on the stern. This would aid in handling the net and would preclude, in most instances, the necessity of the lifting of the heavy cod end over the side. With a larger vessel a shelter deck could be provided.

A Combination 84' Seiner-trawler

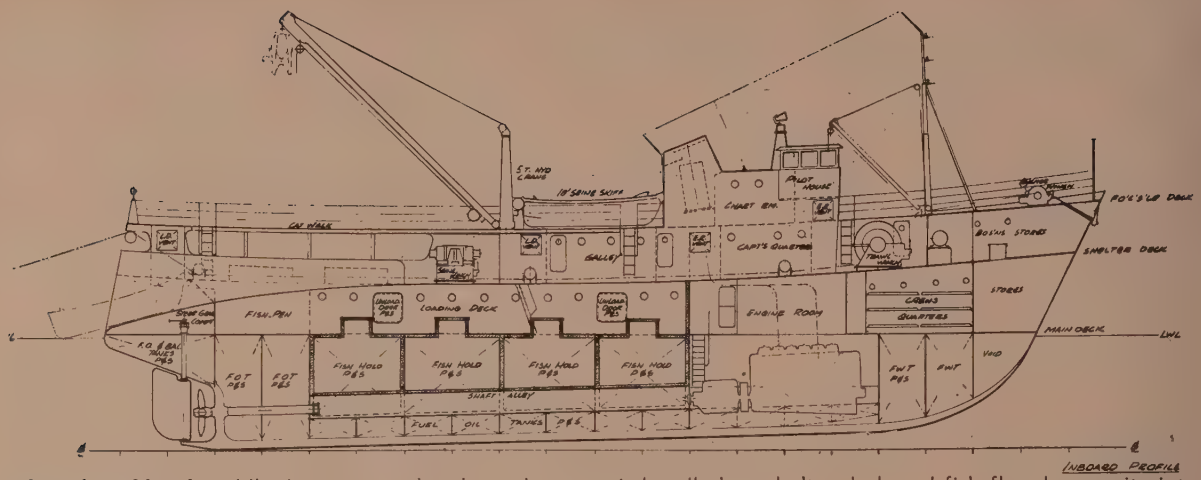
● Drawings of an 84' combination trawler for the local Pacific Northwest fishery accompany this article. Major departures from the current seiner-trawler include an offset deck house, a stern ramp, and a combination offset trawl winch. The rather unique deck plan offers a number of advantages:

(1) the offset deck house provides extremely good visibility from the pilot house (approximately 315°) which allows the skipper to observe the handling of fishing gear on deck;

(2) the winch operator, protected by the raised forecastle, has complete vision of the trawl warps at all times;

(3) a large clear work area is available;

(4) a hydraulically controlled boom



Inboard Profile of middle-distance trawler shows how net is handled on shelter deck and fish flow by gravity into refrigerated holds.

or crane is free to swing 300°; and

(5) the stern ramp and drum winch combination bring the cod end aboard in two hauls. If "splitting" is necessary this can be accomplished in the normal process.

The hold is designed to provide ice storage, holding refrigeration, or chilled sea water. The vessel has an estimated fish capacity of 120,000 pounds of iced fish or 129,000 pounds of fish carried in chilled sea water.

The vessel is adaptable to other fisheries, as it can be easily converted for seining operations or for the longline fishery. In addition to the bottom-trawl fishery, the 84′ vessel can be used in the Alaska king-crab or shrimp-trawl fisheries.

Conversion of this vessel to seining is accomplished by use of a falsework structure to fill the stern trawl chute, thus providing a flush net platform from which a purse seine could be operated readily by the power-block method.

It should be noted that the seine winch is placed just abaft the house on the opposite side of the centerline of the vessel from that on which the trawl winch is installed. This would confine seining operation to one side of the craft—starboard in the drawing, but deck plan could be reversed in constructing the vessel if seining over the port side is preferred.

A Middle-Distance 127′ Trawlers-Seiner

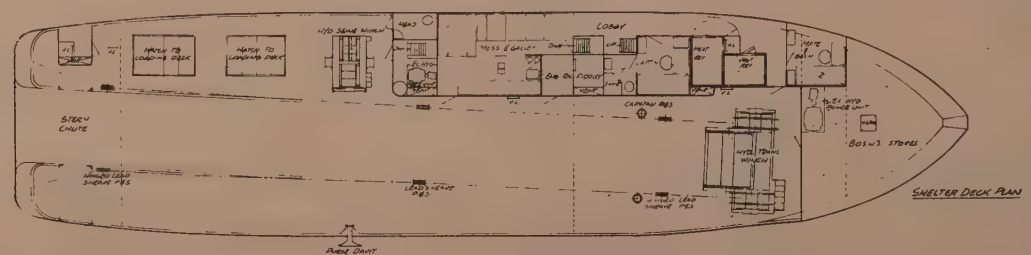
● We have also studied the possibilities in development of vessel designed primarily for middle-distance trawling, but also convertible to purse seining. We show sketches accompanying this article for a 127′ craft. While primarily a trawler, it would fall within the size range of seiners now proving so popular in tuna fishing. As in the case of the smaller vessel, an offset house, stern chute, and forward-placed drum trawl winch are suggested. The advantages of this arrangement are similar to those given for the smaller boat. The added length of the 127-footer allows for bringing the net aboard in one haul.

A shelter deck is provided to handle or process the catch. Processing equipment, if desired, can be installed on the shelter deck. The catch is hauled to the work deck, spilled through a loading hatch, separated into fish bins, and then loaded into the fish hold. Doors are provided on the side shelter deck for fast unloading. If dock facilities are not adequate for handling side unloading, then the unloading hatch can be used. Hold capacity is about 400,000 lbs. for iced fish and 430,000 lbs. when carried in chilled sea water.

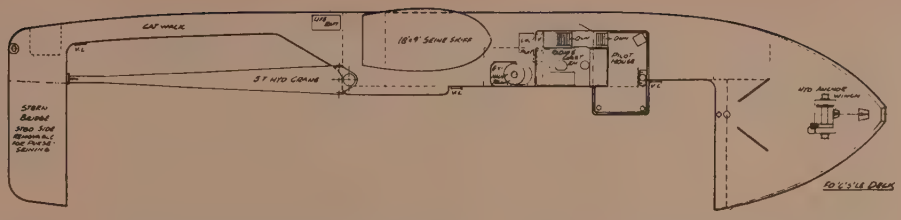
The vessel also can be used in the seine fisheries for herring, sardines, or tuna, as well as for king crab or shrimp fishing.

● The smaller trawler is proposed for operation in areas currently exploited by Puget Sound trawlers, from the Columbia River to Northern Hecate Strait. Maximum running distance within this geographic area would not exceed 500 miles, although operational capabilities of the vessels greatly exceed this. The more productive grounds within this range lie at the north end of Vancouver Island and within Hecate Strait. Southeast storms are frequent in these waters through much of the year and current small trawl vessels lose close to 35% of their available fishing time because of adverse weather. The utilization of the stern chute should allow fishing in relatively heavy seas. If one additional fishing day per trip could be attained, the average catch per trip could be increased 15 to 20%. Reduction in hauling and setting time should also add to the general fishing efficiency.

The larger trawler is suggested as a medium-distant trawler which could fish all areas now fished, as well as the extensive banks of the Gulf of Alaska. Maximum operating range without processing equipment would be about 1,400 miles. Operating condi-



Trawl comes aboard in one haul of this 174′ stern-chute drum trawler. Note the commodious working space on virtually the entire starboard side, but with protection from head seas.



Unusual feature of this vessel, its off-set house, is shown in this fo'c'sle deck plant. Note that the seine crane also is off-center, and that the stern bridge is removable for seining.

tions would be more severe than those encountered on current grounds, as gales are common through a large part of the year. The large "single-haul" trawl system through the stern chute of the 127' trawler would improve its fishing ability, while the shelter deck would provide protection for the crew when handling catches. The trawl grounds of the Gulf have been reported to host large concentrations of unfished Pacific Ocean perch, which should provide high yields per fishing effort for distant trawlers. The growth of future U. S. markets, coupled with possible changes in territorial seas, could provide the incentive to initiate trawling on the more distant grounds.

● It will be noted in the sketch that the 127-footer has a stern bridge crossing above the trawl chute. This bridge is designed to be portable, and would be removed in case of conversion to seining, when the chute would also be filled by a portable structure, as in the case of the smaller craft.

The larger vessel would be able to carry diesel-powered refrigeration compressors on the main deck on one side of the engine casing, giving her the ability to handle her catch in low temperature sea water.

Processing facilities also could be installed on the main deck if this should prove desirable.

Aid Asked for Canadian Herring, Whaling Effort

● Assistance from the Canadian government to help revive the whaling and herring industries in British Columbia is being urged by the Fisheries Council of Canada following its annual meeting in Vancouver, B. C.

As a result of depressed markets for oil and meal, no whales or herring are being taken off the B. C. coast this summer and unless the economic situation improves there is small prospect of early revival of these operations. The whaling fleet of B. C. Packers is now tied up in Coal Harbor, and more than 1,000 fishermen who normally would have engaged in the herring fishery are either idle or have turned to other occupations.

Special research into new products and uses of herring and whale, and Canadian participation in a proposed international conference on fish meal production and marketing have been asked for by the council.

The same organization asked Ottawa to undertake research into Canadian consumer attitudes towards fish, to abolish federal subsidies on pork, which are regarded as discriminatory, and to lift heavy duties in importation of larger fishing vessels.

John Vilar, 57, a Monterey, Calif., fisherman for the past 39 years died at his home recently.

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TONY MIHOVILOVIC, Captain of 86 ft. Combination Boat *"MURAUDER"* reports: "I've been using A. M. STARR Nylon Nets for the past four years, and you just can't beat them. Last year we made seven trips for tuna, and our total catch was 840 TONS. I particularly like Starr Netting because it has extreme strength with lightness of weight and is so easy to handle. Starr Nets are the most dependable of all and there's only a minimum amount of upkeep."

TERRY TARABOCHIA, Captain of Gillnetter *"BALLERINA"* reports: "My Starr Net was very successful on *Humpies* in 1959. We increased our catch at least 50 per cent over other years when I fished with other nets. You just can't beat STARR NYLON NETTING for fishing."

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Another in a new series of Starr advertisements direct from the fishermen using Starr Nylon Netting.

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Tiara, built in Vancouver, B.C., has already put her ruggedness and seaworthiness to critical tests in gillnet fishing.

Glass-Hulled Gillnetter Succeeds

● One of the first fiberglass-and-plastic gillnetters to be built and operated in British Columbia is *Tiara,* owned by Robert Findlay, who has found it to be an excellent sea boat, efficient and durable.

The boat was built by B. C. Glass Hulls, Ltd., Vancouver, B. C. Length is 34′ 9″, beam 10′ 6″, depth forward 7′ 3″, depth aft 4′ 6″ and draft light 3′ 8″. Powered by a GM 6-71 diesel, speed when carrying net, stores and fuel has averaged 16 knots. Displacement is 12,000 lbs.

When the hull was turned over to Mr. Findlay he did the cabin work and installation himself with some professional help.

The *Tiara* has demonstrated its seagoing characteristics on several occasions, and Mr. Findlay has never had to put off a run because of weather conditions.

Tiara went on the rocks in the Skeena river during a demonstration run at 8 knots. The boat came to a complete halt in the space of about 6 inches. Apart from the engine coming slightly out of line, damage was confined to the fiberglass stem and required only a few hours to repair. The shell was not punctured, and shipyard men were surprised at the small amount of damage.

● W. E. G. Talbot, president of B. C. Glass Hulls, Ltd., tells *Pacific Fisherman* that his company will be manumanufactures completed gillnetters on fiberglass hulls. The 34′ boats, powered with Chrysler Royal engines, are designed to make 14 knots. Unlike *Tiara,* these vessels will have galley and dinette in the wheel house instead of the forecastle.

Eureka News Notes

Eureka Fisheries, Inc., has opened a sea food restaurant in downtown Eureka in conjunction with the retail fish market which it established some time ago.

Tom Lazio Fish Co., Eureka, has expanded its operations to Winchester Bay on the Umpqua River in Oregon.

Here the firm has a 100 x 100′ freezer and holding room, with refrigeration supplied by six compressors. The firm will receive flat fish,

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12¢ a word per time, $4.00 minimum. (For box numbers addressed to PFN, add $1.50.) Business card display—$29.00 per column in. per insertion, with lower rates on contract basis. Mail all copy to PACIFIC FISHERMAN'S NEWS, 71 Columbia St., Seattle 4, Washington.

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rock fish, and possibly crabs. A 14-place fillet line is part of the facilities. Fish will be filleted there and trucked to Eureka for distribution.

Three small draggers make Winchester Bay their home port and are fishing for the Lazio company.

Prospects for the 1960 salmon season look good in Eureka, according to Angelo Intersimone, manager, Tom Lazio Fish Co.

Salmon had not appeared in any quantity around Eureka by the middle of May, however. Shrimp fishing prospects were also thought to be excellent. The Lazio company has the *General Pershing*, Leonard Harrison and Albin Hakans, partners, ready to go.

Lawrence Lazio, son of Tom Lazio, head of Tom Lazio Fish Co., Eureka, is now actively participating in the business, although he is still a student at Humboldt State College, Arcata, where he is taking a course in fisheries, as well as other studies.

The trawler *Junior* from Seattle, is now fishing for Tom Lazio Fish Co.

John Kinder, who used to fish the *Ruby A.*, and Dean Randall, former skipper of the *Wolverine*, have purchased the well known dragger *Rainbow* and will fish for Eureka Fisheries, Inc., Fields Landing (Eureka).

The *Corregidor*, trawler owned by John Collins, Trinidad, Calif., almost destroyed by a fire, was repaired at Gillette Marine Ways, Fairhaven (Eureka), and has been repowered with a Tasco Ford 6 cyl. marine diesel engine purchased from and installed by Lyman Repair Service, Eureka.

Elliot Inflatable Rafts Get First C.G. Approval

Elliot equipment has been awarded the first U. S. Coast Guard approval of inflatable life rafts, which automatically inflate complete with double floor, sides, top, closable entrances, and emergency equipment in a matter of seconds.

Official records of marine casualties show that inflatable rafts have taken survivors through Force 10 gales, exceedingly steep seas, tropical and North Sea weather, and that they have been quickly handled, inflated, and boarded where solid rafts and boats have been impossible to handle. Elliots alone are credited with the saving of 166 lives since 1956.

Fishboats, tugs, yachts, etc., can can now carry lifesaving equipment equal to that found on the largest vessels. As an example, the 6-man Elliot weighs only 71 lbs., and packs into a roll 32" long and 18" in diameter, with standard equipment.

Elliots are made in Sausalito, California, and Cardiff, Wales; U. S. sales agents are the C. J. Hendry Company, San Francisco, California.

U.S.C.G. - Approved Elliot inflatable life rafts on the floor at the C. J. Hendry plant at Sausalito, Calif. In addition to the equipment earning Coast Guard approval generally, each individual raft is subjected to exhaustive tests and inspection.

Tests undergone prior to U.S.C.G. approval included ability to be dropped 60' into water, to support a full load at sea for 30 days, to withstand men jumping on the canopy from 15', and to operate successfully in temperatures from -20 to 160° F.

Two Trollers Overhauled

Shoreline Diesel Maintenance, Fishermen's Wharf, San Francisco, recently did a big overhaul job on the GM 6-71 diesel engine in the troller *Fisherman's Grotto No. 9*, and on the GM 6-71 diesel in *Hildegard*, troller owned by M. B. Griffin, San Francisco.

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Prowler is Capt. Pedersen's second Lister-equipped boat. Her *air cooled* 2 cyl. 8½ HP Lister SL2 economically powers a 5KW 115/140 volt Kurz & Root generator, Model 30 Quincy air compressor and 1¼" Jabsco 823 pump. The 70 ft. Pedersen scalloper *"Snoopy"*, launched 1957, is Lister auxiliary — powered too — her water cooled Model FR-1 also drives a Kurz & Root generator, Quincy compressor and Jabsco pump.

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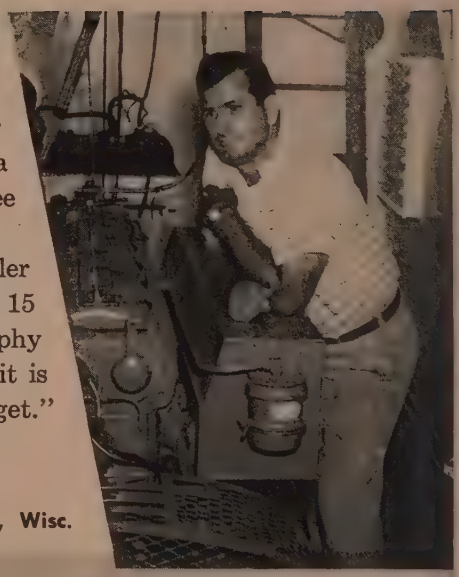

"Naturally, I chose a Murphy for my new trawler, after 7 years aboard the trawler *Cynthia Marie*, powered with a Murphy Diesel that gave me more than 45,000 trouble-free hours of perfect running.

"My 65-foot *Darcy Lyle*, the first all-steel shrimp trawler built for fishing in Louisiana waters in the past 10 or 15 years, is powered with a 227 HP (continuous) Murphy Diesel. The Murphy is a real 'heavy.' I like it because it is most economical and about as trouble-free as you can get."

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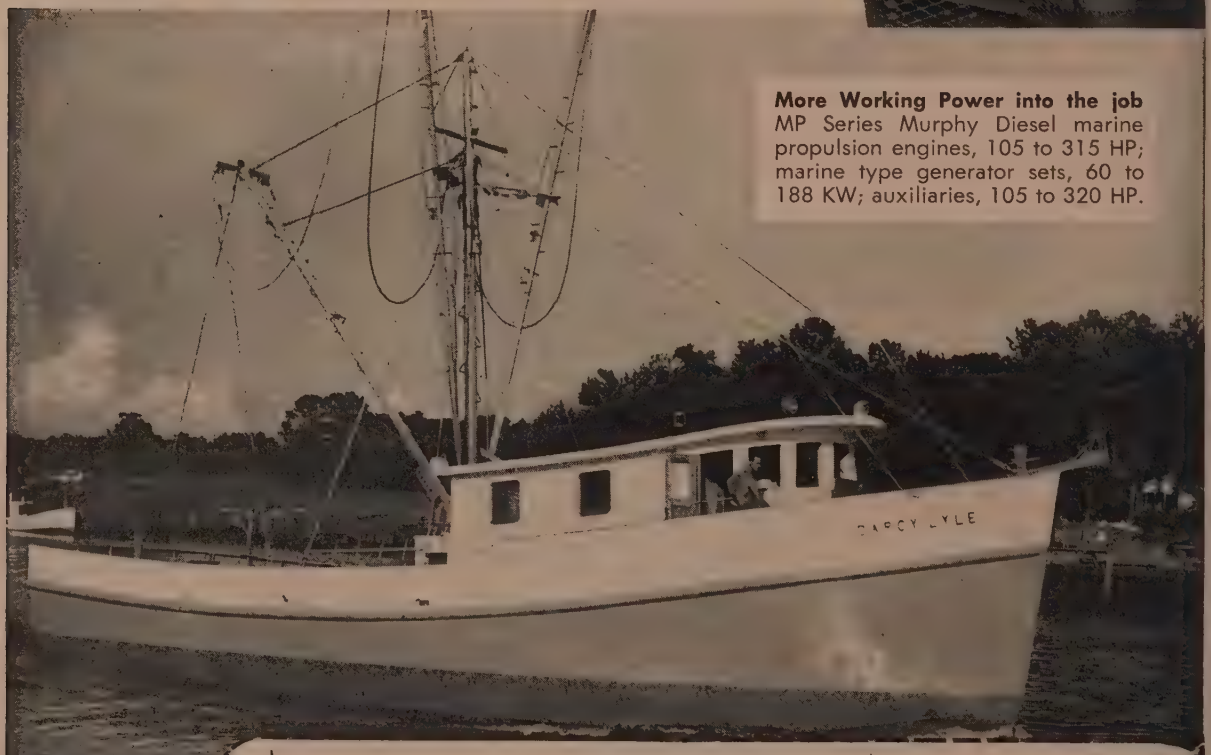

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By
MILAN D. SMITH
President, National
Canners Association

An address delivered before the California Fish Canners Association and the Southern California Fish Canners Association at Long Beach, Calif., Mr. Smith heads Smith Canning Co., Pendleton, Ore.

● Within the history of the development of the tuna industry is found documentation for practically every factor basic to the growth and future of the canning industry as a whole.

Tuna was the last of today's great seafoods to be canned, but today it is the largest. Its growth has been steady and astonishing from its bare beginnings less than 60 years ago.

One only has to look at the phenomenal growth of the industry in the past 10 short years. In 1949 the total production of the American canned tuna industry was a little over seven million cases. Last year saw a record pack of over 14 million cases of tuna, a growth factor of 98.4%. During this same period population increased only 19%. Pack and consumption during this period increased at a rate that was five times the rate of population increase. As the father of nine children (the tenth to join the family circle in about two weeks), I consider myself somewhat of an authority on these matters.

It used to be said that the two favorites of the American diet were hamburgers and hot dogs. One only has to look at the figures I have just quoted, or better yet take a look at menus of restaurants from coast to coast, to find a third item added to the All-American favorites—tuna.

As with the growth of the acceptance and need of the American public for canned foods generally, there are good reasons for the ever-growing position which the tuna industry has captured in the American diet.

From what I can learn, the stamina of the founders and leaders of the tuna industry is only to be matched by the vigor and rugged individualism abundant in the romantic history of the tuna fishermen who endure the untold hardships of the sea in plying their trade.

● It is significant, I think, that while the tuna canners are faced with the same unpredictability of all canners, who must depend to a large extent upon the abundance of nature for their raw product, the tuna canner has faced the frailties of this dependence with the same lone courage as the captain of the tuna clipper facing the storms of the sea. In an age when government aid or support is considered by many to be the norm, the expected or, worse yet, the deserved, the tuna industry, from the fisherman to the canner, has possessed the stamina and resourcefulness to face the hazards of nature and of man without seeking artificial federal props.

Further, at the present time, it is my understanding that the tuna industry finds itself among those American industries faced with the serious adjustments of freer world trade for the sake of maintaining the economic health and prosperity of our allies in the free world. Like most of the domestic industries facing this difficult situation, the tuna industry has been denied the help which many think they deserve. However, with the same resilience of their past, the industry is showing every indication that regardless of the competitive handicaps of foreign labor and subsidized competitors, it can and will survive.

● Another quality basic to the success of the tuna industry, as well as canned foods generally, is that of imagination.

Considering that some 60 years ago, unless you resided in a coastal area and just happened to have experienced the then rare delicacy of tuna fish, you would have never considered tuna as a food.

History shows that imagination did not stop with the initiation of the pack. It has been apparent in each stage of the development of this industry, and has manifest itself in the development and marketing of styles of pack, sizes of containers and creative formula products to meet the growing demands of the consuming public.

● The tuna industry has joined with the total industry in the development and employment of quality control techniques which assure the consumer of the highest quality of wholesome food available for the lowest possible prices. It is interesting to note that consumers are paying less for a can of tuna today than they were in 1952 when the first figures were available. Every housewife is familiar with what has happened to the prices of other foods during this same period. Early in its relatively young history the tuna industry voluntarily undertook the research and initiative to standardize its product. I understand the industry voluntarily spent over seven years and many research dollars to ensure the American housewife that she could buy canned tuna with confidence. This I am sure is only the beginning of the constant surveillance and progress that will be made to insure the quality and wholesomeness of canned tuna.

We have in this effort just one outstanding example of how the tuna industry, and indeed the entire caning industry, is answering in the best possible manner any who question the industry's ability and desire to protect the consumer.

I hope that those of you who are with us who pack products other than tuna will pardon the specific references which I have repeatedly made to the tuna industry. But I think you will agree that inherent in the phenomenal success story of the tuna industry are the basic ingredients which have contributed to the growth and development of the canning industry generally. If we take some of the factors which I have briefly mentioned, such as stamina, individual initiative and courage, resourcefulness, imagination, the desire and ability to constantly improve the quality and wholesomeness of our products, coupled, on an industry-wide basis, with the new found unity of the tuna industry; together we can reach new levels of excellence, acceptance and service to the nation as a whole.

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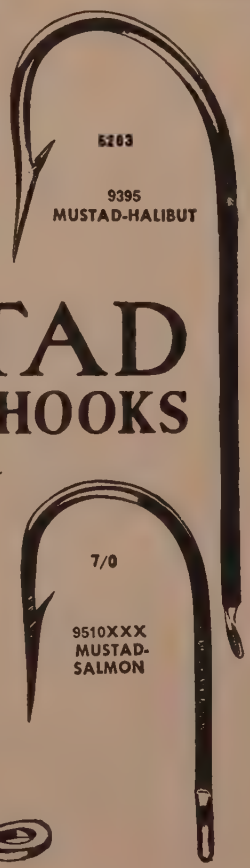

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Sound Pollution Control Is Objective in Canada

• With the rapid growth of municipal and industrial development in the Pacific Northwest, the threat of stream pollution is a problem of increasing concern to the fishing industry and fisheries administration.

The subject was dealt with at the Fisheries Council of Canada annual meeting in Vancouver, B. C., by a panel of experts—Dr. M. Waldichuk, of the Nanaimo biological station; Frank Maher, provincial natural resources department; Charles Clay, Department of Fisheries engineer, and Loyd Royal, director, International Pacific Salmon Commission.

Here are some of their observations:

• A problem in itself is to define pollution and determine the degree of pollution likely to affect fisheries adversely.

• The lack of specific yardsticks to appraise potential damage to fish due to pollution has been one of the difficulties in seeking co-operation from industries not directly concerned with fisheries.

• Readiest co-operation is from the larger companies such as pulp mills and chemical plants whose management is alert to community welfare and public relations.

• Second-best response is from small operators who are anxious to respect the law and stay out of trouble.

• Most of the resistance is from the "in-between" group who are inclined to question conservation measures if they cost them money.

• Once pollution-prevention measures have been taken, fisheries agencies should demonstrate good faith by continuing inspection and research.

• Probably less is known about the effects of pollution than any other problem concerning the fisheries.

• No one can be expected to come up with all the answers. There is a need for more collaboration between all groups with an interest in and knowledge of pollution's causes, effects and prevention or elimination.

• It isn't enough to prevent pollution that is harmful to fish; it's just as important to prevent contamination or destruction of feed that sustains the fish.

• Enforcement of effective pollution control depends on industry's recognition that it has no right to interfere with multiple water use, and on mutual respect between industry and fisheries authorities.

New president of the Fisheries Council is Reginald E. Matthews, general manager, White Fish Co., Toronto, and the 1961 annual meeting will be held in that city. Mr. Matthews succeeds R. T. Hager, Canadian Fishing Co., Vancouver, who continues as a director. R. L. Payne, J. H. Todd & Sons is the new vice president representing the west coast, and other B. C. directors are Don Miller, Canadian Fishing Co.; J. N. Hyland, B. C. Packers; R. I. Nelson, Nelson Bros. Fisheries; Frank Millerd Jr., Francis Millerd & Co.; O. J. McDonald, Queen Charlotte Fisheries; T. H. Sorenson Prince Rupert Fishermen's Co-operative.

New President of the Fisheries Council of Canada is Reginald E. Matthews of Whites Fish Co., Toronto, shown here at left accepting the gavel in traditional ceremony from retiring president Roger T. Hager, president, Canadian Fishing Co., Vancouver, B. C., at close of the Council's annual meeting.

Trucks Replace Packers In Vancouver I. Fishery

• A minor revolution in transportation of fish from the west coast of Vancouver Island to mainland processing plants in the Vancouver area is taking place as trucks carry increasing volume from Port Alberni to ferry terminals at Nanaimo for transshipment.

Instead of using packers on the comparatively long haul from Barclay Sound through open water to the Gulf of Georgia and thence to Vancouver or Steveston, fish shipments are loaded on trucks in Port Alberni and an overnight trip lands the supplies at destination early in the morning.

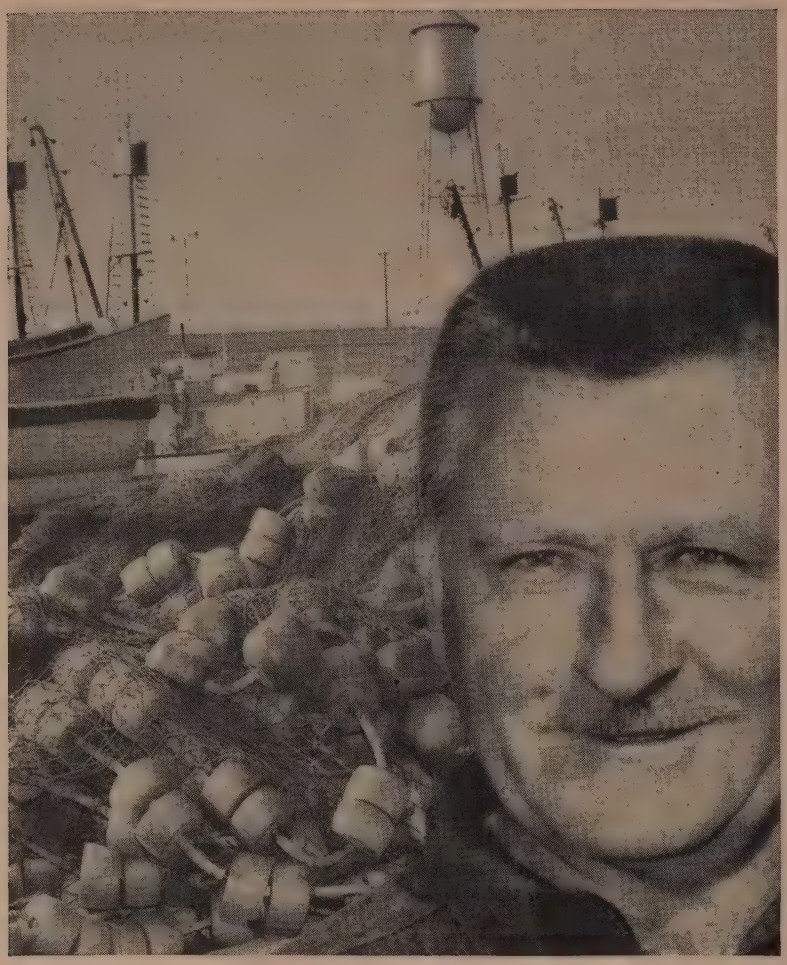
B. C. Packers and Tulloch Fisheries have been trucking to some extent, the shipments being mostly troll-caught salmon; but this spring the principal user of this form of transportation has been Nelson Bros. Fisheries which are exploiting new shrimp beds in Barclay Sound.

Until a few months ago, most of the shrimp for the Vancouver plants were taken off the Fraser River sandbanks or off the east coast of Vancouver Island near Chemainus or Yellow Point, but when the harvest declined in those areas, shrimp fishermen tried out the west coast of Vancouver Island, where trial operations carried out for the Department of Fisheries indicated fairly substantial shrimp supplies in about 40-50 fathoms.

• At a time when most fishing operations have been inactive in B.C., about 90 fishermen and their families, all Japanese-Canadians, are employed in the west coast shrimp fishery. Ten shrimp boats and a packer have been in operation for Nelson Bros., working for the Paramount plant at Steveston.

The packer delivers the catch to Port Alberni, where it is loaded on trucks for the Vancouver market. Because of the brief time in transit, refrigeration is not required.

Shrimping in Barclay Sound, mostly concentrated around Ecoole, is a family affair, carried on chiefly by husband and sons working the boats and wives and daughters and their friends conducting the shore operation—handling about 1,400 lbs. of meat from the daily catch, with 60 to 100 shrimps per pound in the green stage. Each woman can pick about three pounds an hour, according to Bill Nelson, manager of the Nelson Bros. plant at Steveston.



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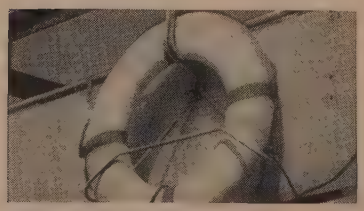
. . . says veteran of 24 years' fishing

"I have been fishing for 24 years now, and from my experience, there is no equal to Spongex floats," says Captain Sam Uskovich of the 97′ tuna seiner, "Ronnei M", San Pedro, California.

"We've been using Spongex floats for the past four years, and replacement has been very small compared to other floats we've used. One Spongex float has the same buoyancy as four ordinary floats, and they don't get waterlogged," said Captain Uskovich.

All these advantages listed by Captain Uskovich—and many others—are what have put B.F.Goodrich floats on regular and newly converted seiners in fishing fleets everywhere. These B.F.Goodrich floats come in 17 sizes, ranging from 3″ x 1½″ to 6″ x 14″. For full information, write to *The B.F.Goodrich Company, 145 Derby Place, Shelton, Connecticut.*



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Japanese License Another Crab Factory Ship for Bering Sea

(PF Staff Report)

Early in May, Japan's Fishery Agency gave a license for fishing in the Bering Sea, close to Bristol Bay, to the *Shin-yo Maru,* 3400 gross tons, of Hokuyo Suisan K.K., as a "trawl fishery mothership" together with a specific license allowing it to pack some canned King crab as a tentative operation.

Renamed after purchase by its present owners, the ship was formerly the *Meisei Maru,* a salmon mothership of Nichiro Gyogyo K.K. The application for its present license was filed a few months ago, but has been held because of objections made by other Japanese fishing companies with crabbing interests in the Bering Sea.

The object of the venture, it is mentioned, is to catch 200 tons of King crab, 2700 tons of herring, 700 tons of codfish and 400 tons of other bottom fish including pollack to a total of 4,000 tons.

The Fishery Agency permitted it to use just 15,000 shackles of crab tangglenet. Use of this amount of gear is to enable the fleet to catch no more than 200 tons of crab or no more than 20,000 standard cases of finished cans. The ship was to leave Hakodate on May 14 with eight trawlers. The Fishery Agency also gave strict instruction that the *Shin-yo Maru* should avoid the location of *Tokei Maru,* in consideration of King crab resources.

Grays Harbor Whaling Studied by Californians

Possibility of re-establishing a whaling business on Grays Harbor is being studied by Pacific Sea Products, Inc., Pont San Pablo, Calif., which is discussing the matter with the city government of Hoquiam, Wash. The project would involve establishment of a whaling station at the municipal fishing boat haven at Hoquiam.

City approval, and investment of about $56,000 in bringing the haven up to the company's requirements, would be required.

The Point San Pablo firm is engaged in whaling out of San Francisco Bay and processing the whales into meat for pet food, whale oil and whale meal.

Whaling formerly was an established industry on Grays Harbor, where a station at Bay City was active for many years. Coastal fishermen now report large numbers of whales frequenting the inshore waters in the vicinity of Grays Harbor.

Stalemate at Geneva Disappoints Canadians

● Canadian fishing interests were deeply disappointed by the breakdown of the Geneva conference on the law of the sea, and their regrets were officially expressed by Fisheries Minister J. Angus MacLean and External Affairs Minister Howard Green, of Vancouver, who headed the Canadian delegation to the conference.

"It's particularly tough for us when it's considered that the Canadian compromise failed by only one vote," said Mr. MacLean.

Mr. MacLean denied that the Canadian delegation had agreed to renegotiate fishing boundaries after ten years with nations holding historic rights to Canadian coastal areas.

"The proposal was for automatic termination as far as foreign countries are concerned," he said. The U. S.-Canadian proposal provided for a six-mile territorial limit with a 12-mile limit for exclusive fishing rights after ten years. During the ten years nations with historic rights could fish up to the six-mile limit.

Mr. MacLean agreed that the Canadian proposal would have to be modified to win the necessary two-thirds majority.

Meanwhile Mr. Green in Ottawa has hinted at the possibility of a 54-nation agreement binding the countries that expressed approval of the plan turned down at Geneva.

The question was raised in the House of Commons by Lester Pearson, Liberal leader and a former minister of external affairs. Mr. Green said that such an arrangement would require careful consideration in all its implications before action could be taken.

● Special situations, involving only a few countries, were responsible for collapse of the Geneva conference on the Law of the Sea, according to Dean George F. Curtis, of the University of B.C.'s school of law, one of the Canadian delegates to the abortive parley.

For instance, Chile, Peru and Equador claimed rights of control to within 200 miles of their coastline as a protection for their fisheries. Some countries in Asia wanted to be safeguarded against Japanese fishermen's invasion of their coastal waters.

Indonesia and the Philippines, added Dr. Curtis, wanted to draw a line completely inclosing their island nations, and some other nations were impressed by Soviet Russia's security argument, which was that a six-mile territorial limit would allow countries to stage intimidating naval demonstrations.

Dr. Curtis also blames rising nationalism among the Arab states. Is in his opinion that no one won at Geneva; even the nations that originally held out for the retention of the three-mile territorial limit realized that such restriction was obsolete under present-day conditions, according to Dr. Curtis. Collapse of the conference, Dr. Curtis believes, leaves unchecked an explosive situation that leaves the way open for continuing disputes over territorial waters, such as the traditional one between Britain and Iceland.

Just what happens now, no one seems to know. The Geneva conference was the third of its kind, designed to bring uniformity and stability in international sea law. There are no plans for another conference.

Tuna Mothership Fleet Extends Operation Area

(Staff Report)

The Fishery Agency in Japan has not recognized increase of total catch quota for operations this year, despite requests by operating companies, but an extension of operation area was made. In waters south of the Equator, the area west of 170° E. had been closed up to 1959. For 1960, waters west of 170° E. are closed as before, but only as far south as 25° S. Below that point, the border of operation was opened westward to 160° E. (No change has been made in waters north of the Equator.)

Early in May, Taiyo Gyogyo K.K.'s tuna mothership No. 3, *Ten-yo Maru,* 3200 gross tons, departed from Tokyo for the usual fishing ground around Fiji. That mothership unit maintains a fleet of 45 catcher boats with a total catch quota of 5,700 tons. This fleet will fish about the northern offing of Fiji Island for about two weeks, primarily for Yellowfin, and then move southward in quest of Albacore.

Other tuna motherships to operate this year include *Koyo Maru,* 7658 gross tons; a second round of No. 3, *Ten-yo Maru; Nojima Maru,* 8503 gross tons, of Nippon Suisan K.K.; and *Jin-yo Maru,* 7207 gross tons, of Hokkaido Gyogyo Kosha.

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Tuna Reseachers Map Practical Program

● The research program mapped out for fiscal 1961 by the Pacific Oceanic Fishery Investigations is designed to bring out some practical, useful information for tuna fishermen in Eastern Pacific waters.

The behavior of Skipjack and Yellowfin tunas in the Eastern Pacific, especially off the coasts of Mexico and Central America, is to be studied from an improved research vessel. The *Charles H. Gilbert,* which has been used by the POFI for research cruises, recently had a new bow chamber added at Gunderson Bros. Engineering in Portland, to provide a better vantage point for scientists to delve into the habits of the Eastern Pacific tunas.

By the end of 1960, it was said, the POFI scientists expect to have completed behavior studies of Skipjack in bait fishing off the Hawaiian Islands; also studies of the waters off Mexico, Central America and the Line Islands, and studies of Yellowfin in US coastal waters and off the Line Islands.

Practical knowledge of the reaction of Skipjack to fishing gear is expected to come from some pond studies proposed as part of the POFI program. These pond studies will observe the Skipjack's reaction to sounds, colors, big or little objects, and to the way the objects move in the water.

It was said that there is a possibility that a "behavior submarine" may be built to enable research men to watch the fish more closely and get better information on their reaction to various sights and sounds.

Bait Studies

The POFI will probably continue its studies of bait fishes such as Marquesan sardines, tilapia and threadfin shad. The behavior studies being carried out may indicate some important changes in fishing methods and fishing gear, it was suggested.

Of longer-range importance are POFI's studies of the biology of Skipjack and Albacore. The proposed program includes research on the distribution, spawning habits, nature and life of the eggs, larvae and juveniles of these varieties of tuna.

POFI will also continue its studies of catch statistics, on a Pacific-wide basis, related with studies of the biology and ecology of the fish—that is to say, of the fish themselves and their surroundings in the ocean. These studies could have great practical value, in indicating to fishermen where and when the fish are most likely to be found—in other words, increasing the yield of fish per unit of effort, which is what every fisherman is most interested in.

Getting the Good Men

Again on the practical side, POFI is working with the University of Hawaii toward the goal of interesting promising young men in coming into fisheries work. The organization is providing speakers to talk to qualified groups of these young men.

POFI every year holds a general consultation meeting with its Tuna Advisors, an industry group made up of the top-level representatives of canners, boat owners, labor unions, scientists and the public. Headquarters of POFI are in Honolulu.

Three More Years To Study Fraser R. Dams

● A proposed $500,000,000 flood control and power development program for the Fraser river will require three years of fisheries and engineering studies before any go-ahead order can be given, according to Ottawa authorities.

T. M. Patterson, director of the federal government's water resources branch, told a House of Commons committee that the Fraser River Board had been given until 1963 to report on the probable effect on fisheries of the project and on the engineering feasibility of the proposed eleven low-level dams included in the plan.

The proposed dams would be built on the Clearwater, Stuart and Cariboo rivers.

Both the B. C. and Canadian governments are committed to protection of the Fraser's salmon fishery and for that reason all suggestions for dam construction on the river have been rejected in the past, even though it is claimed that more and cheaper hydroelectric energy could be generated on the Fraser than on any other B. C. river. While some engineers have claimed that salmon and power can be reconciled on the Fraser, those who have studied the problem most intensively are unwilling to concede that point on the basis of present knowledge and experience.

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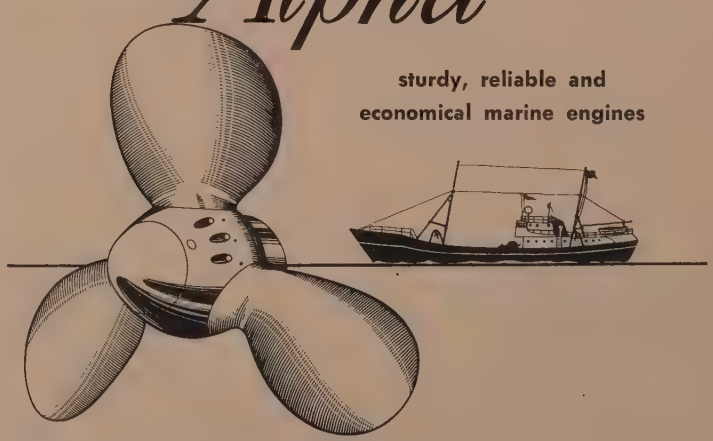

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FOOD FISH MARKETING

Section of PACIFIC FISHERMAN —

News and Views of National Trade in Fish and Shellfish

June 1960

American Salmon Market Needs Substantial Pack

● Supplies of canned salmon remaining in the hands of middle American chains and large distributors were negligible as the industry entered the last month before new salmon supplies could be expected.

This was reported by substantial distributors in attendance at the National Fisheries Institute Convention at Miami Beach in May.

They reported that the market in the Middle West at least was deeply in need of a *substantial* pack, which, as one man put it, would "give us the volume we *need* at a price level stimulating to sales."

This same man reported that the salmon stocks, although high priced and thinly allocated, had sold actively in Lent *in spite* of the price and that there are today no material supplies on hand in the American heartland.

One man put it this way:

"Canned salmon must be available in *volume* and at a *value* if it is to win the new generation of housewives. This enormous market, and the one on which the future depends, is now largely monopolized by tuna—which is *always* available *everywhere*, and usually at *real values*." Asked to suggest actual prices for salmon which he thought would present values which could command volume, this distributor suggested a retail price for Alaska red halves at anything under 50 cents per can, and a pricing which would permit 1 lb. red talls to sell at from 75 to 79 cents. His idea as to desirable retail pricing for pinks was that pink talls should sell in the range of 55-59 cents.

Opinion at the Miami Convention rated the advertising and promotion campaign of the Canned Salmon Institute very highly, but opinion was expressed that for best results the institute program should be supplemented by special advertising deals by individual packers and distributors through the large chains. This was suggested as permitting brand development while at the same time commanding the active sales interest and merchandising stimulus of the enormous retail organizations.

Lynn McKee, U.S. Bureau of Commercial Fisheries, telling the Pacific Fisheries Technologists the good points of the texture-testing instrument he has developed to meet the needs of quality control determinations.

California Imports of Frozen Tuna

Cumulative data in tons for 1960 through May 14, and for other years to the nearest comparable date. Data from U.S. Market News Service

	Albacore	Skipjack	Yellowfin	Unclassified	Total
San Francisco	683	14	3,371	404	4,472
San Pedro	8,142	2,304	9,419	61	19,926
San Diego	2,400	729	689	...	3,818
Total to May 14	11,225	3,047	13,479	465	28,216
1959	7,328	3,265	21,838	21	32,452
1958	6,355	1,544	14,035	84	22,018

Japanese Canned Crab Price Being Raised $1

(PF Staff Report)

Price of Japanese canned crab will be raised by $1 for both King and Kegani crab when the first sale of the new year is executed at the middle of June by the packers' joint overseas selling company, it is reported. The new ocean pack King crabs will have been landed home by that time. Japanese crab factoryships operating in the Okhotsk Sea and eastern Bering Sea all report good fishing at this writing.

The new export price was to be $26.15 f.o.b. for fancy King crab No. 2 (standard) cans per case (4 doz.) as against $25.15 when a bulk sale was made last fall to the U.K. and U.S. Kegani will be sold at $17.50 to the U.K. and at $17.00 to the U.S. as against the previous quotation of $16.50. However, sale of King crab at the new price would be limited to a certain quantity, with an expectation that the rest of the new pack could be elevated still higher in price.

John Salmon Passes

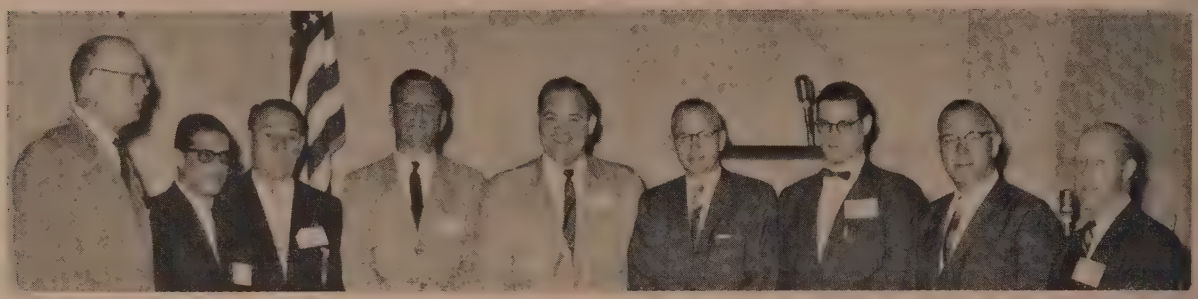
John E. Salmon, who was an organizer of Oceanic Sales Co., Seattle, in 1927 and had been president of the firm for about 20 years, passed away recently at the age of 74. Active in business and civic affairs, he had been a resident of Seattle since 1900; was born in Coalville, Utah. A salmon broker by profession, he was also a fisherman by avocation, and early last summer was rescued from two days isolation on a fishing trip in a remote area north of Kamloops, B. C.

Robert E. Graham Now With Deming & Gould

Robert E. Graham has been appointed Sales Manager for Deming & Gould Company of Bellingham, Washington.

Fortune Sells Lobsters

Fortune Fisheries, San Francisco, has been appointed northern California distributor for institutional sales for Sebasco Seafoods, Sebasco, Maine, producers of frozen whole lobsters. The lobsters come 20 to the carton.



Panel members on "The Food Additive Amendment" session at the NFI convention. From left, E. A. Ruthford, chairman of the Quality Committee; Sydney K. Opler, convention chairman, who presided at the meeting; Louis Vitale; Aaron Gilman; Ed Kline; Dr. K. L. Milstead, director, Regulatory Management, Bureau of Enforcement, U. S. Food and Drug Administration; Stanley Fass; Thor Tollefson, (R) Washington, and H. E. Crowther, Bureau of Commercial Fisheries.

FOOD ADDITIVES

They are Everyone's Problem

● The fish business can expect to hear a lot more about food additives before it hears less.

That was a conclusion easily drawn at the Miami Beach Convention of the National Fisheries Institute in May. Opinion was general that in the long run the additives amendment to the Food & Drug Act could be adhered to without disastrous effect, but only if it is administered fairly and reasonably and without capricious interpretations. Most difficulty appears to be anticipated from the secondary additives, substances which might be absorbed by a product from its wrapping or container. This problem is expected to prove particularly perplexing in the case of some of the plastic films currently being employed, but the Food & Drug Administration under conditions of secondary additives acquired in this manner appears to have taken a very reasonable stand in granting extensions while existing products which might possibly be under scrutiny are used and manufacturers are devising materials which cannot give offense under the Act.

● The American Cyanamid Company, whose Acronize form of aureomycin was the first antibiotic approved for use on fish, is pursuing actively the steps required to secure full interpretations continuing the sanction of this product for use on fish intended for sale in the form of fillets or steaks. Full clearance on the use of approved antibiotics is anticipated within a period of from one to three months, according to well informed reports at the Convention.

Nitrate Problem Affects Many Pacific Producers

A large segment of the Pacific fishing industry, including salmon trollers and halibut fishermen producing sablefish, purse seiners and gillnetters catching Silver and King salmon, the freezers of salmon and the mild curers, as well as the smokers, are greatly concerned with the adverse position of the Food & Drug Administration and to the additives amendment on the question of the use of sodium nitrate and sodium nitrite on fish. The matter has been in the courts through an action brought by the Los Angeles Smoking & Curing Company, and is now being pursued with the Food & Drug Administration, which has categorically denied that the use of these products to the extent of 200 parts per million on cured fish is not "generally recognized as safe" under the terms of the Food Additives Act.

This position, which is regarded as arbitrary and capricious by the fishing industry, was delivered by the Food & Drug Administration in spite of the fact that the United States Department of Agriculture for many years has permitted the use of these condiments in the curing of meats, notably ham and corn beef, and that the meat packing industry really utilizes these condiments to the extent of 200 parts per million in the packing of many of its products.

That this position grows out of the

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long-standing enmity between the Bureau of Meat Inspection of the Department of Agriculture and the Food & Drug Administration of the Department of Health, Education and Welfare is a matter of common belief among many persons well informed on Washington inter-departmental jealousies.

While it may be possible eventually for the Los Angeles Smoking & Curing Company and other concerns cooperating with it to prove that the nitrate and nitrite condiments are as safe on fish as they are on ham, to the extent of 200 parts per million, an adverse ruling would be a serious blow to the Pacific Coast fisherman and the packers of their products which enter into the cured fish trade.

As the Convention closed it was considered certain that the National Fisheries Institute Smoked and Cured Fish Committee, the Smoked Fish Trades Council of New York, and the Pacific Northwest Fisheries Association would collaborate in pressing for a favorable ruling by the Food & Drug Administration that nitrates and nitrites are as acceptable in the curing of fish as they are in the curing of meats.

Booth's Crescent brand California sardines are now being offered in an 8-oz. oblong can in barbecue tomato sauce. **A. L. Desmond,** vice-president and general sales manager, told **Pacific Fisherman** the new product is meeting with consumer approval wherever it has been introduced.

Richard Kulze Again Heads American Seafood Distrib.

● Richard Kulze, manager, South African Rock Lobster Service Corporation, New York, was re-elected president of the American Seafood Distributors Association at its annual meeting in Miami Beach early in May. Mr. Kulze's report to the Association was widely regarded at the meeting as an important analysis of the fisheries foreign trade economics, and will be reproduced in a forthcoming issue of *Pacific Fisherman.*

ASDA vice president is M. S. Cowen of M. S. Cowen Company, San Francisco, while V. A. Hasland of Boston is secretary and Bernard Benkovitz of Pittsburgh is treasurer. Walter R. Meir, Jr., of Milwaukee is the immediate past president and Miss Elizabeth Guhring of Washington, D. C., continues as executive secretary.

Directors of the Association are L. R. Besore, Fishermen's Federation, Chicago; Henry Branstetter, Crest Importing Company, San Diego; R. P. Fletcher, Jr., Booth Fisheries Corporation, Chicago; Arthur Frohman, L. H. Frohman & Sons, Chicago; Robert J. Gruber, Fisheries Products Inc., Cleveland;

Elliott W. Hudgins, Jr., Elliott W. Hudgins Company, Baltimore; Arthur D. Jarrell, Jarrell & Rea, Pittsburgh; Conway Moore, Chester Moore & Sons, Dallas; Arthur D. Mullin, E. Frank Hopkins Company, Philadelphia;

C. M. Reinke, Wilbur-Ellis Company, Los Angeles; Robert L. Stix, Robert L. Stix, Inc., Bronxville, New York; Leo Weil, Fulton Fish Market, Inc., Louisville; Samuel Wexler, Hamilton Fish Company, Detroit; Robert Young, Wilbur-Ellis Company, New York.

John Lauc Now Heads Sales for P. E. Harris

John Lauc, formerly with the San Francisco Division of Wilbur-Ellis Co., has been appointed Sales Manager for P. E. Harris Company, Inc., Seattle.

Assistant Sales Manager with Mr. Lauc is Elliott Benton, formerly holding that post with G. P. Halferty & Co. Mr. Benton succeeds Walter Tobiason, who is now with the Frank M. Wilson Co. in Stockton, California.

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San Juan's Boil-in-Bag prepared frozen seafood specialties are packaged in these brilliant Glamakote protective cartons produced by Marathon, a division of the American Can Co. Two four-ounce individual servings in plastic foil envelopes are packed in each of these attractive cartons.

Menu Planner For Institutions

A new illustrated menu planner for institutional buyers has recently been prepared by the Seafare Corporation, Los Angeles, which packs and markets Carnation frozen seafood.

The illustrated 20-page booklet contains results of current research on portion control, accurate cost-per-person analysis, a variety of quick and fancy sea-food recipes, and information about methods employed by the Seafare Corporation to achieve consistent high quality in all Carnation seafoods. It also lists and describes the entire Carnation seafood line, including a number of items available for the first time this year.

Single copies may be requested free of charge by writing the Seafare Corporation, 6505 Wilshire Blvd., Los Angeles, Calif.

Individually Frozen Sole Fillets are Innovation

A new angle in fish portions is developing this spring in individually frozen fillets of petrale sole. They are complete fillets, each half a fish, and each selected for perfection of workmanship, quality of fish, and exact weight. The individually frozen fillets are offered in several weights to a half-ounce tolerance.

Whiz-Eardley Fisheries at Seattle and New England Fish Co. at Newport, Ore., are known to be packing the new individual fillet portions.

These fillets, carefully selected for workmanship as well as basic quality and condition, are frozen, skinned side down, in a shelf freezer. They are then sorted for size to an ounce or half-ounce tolerance; and thoroughly glazed by a spray which leaves them well protected.

The frozen fillets are then layer packed in tight master cartons and stored or distributed. The customer gets a fillet of sole that looks like a fish; the chef knows his cost to a fraction of a cent; and he has immediately available, frozen and protected, raw material whose thawing is part of the preparation.

The innovation is reported taking hold with vigor which promises well.

Seattle Market

Market prices currently quoted at presstime by Pacific Northwest brokers and cannery sales department, cases of 48 tins, unless otherwise specified, good quality, as reported by the U. S. Bureau of Commercial Fisheries Market News Service.

Items and Packages

Puget Sound	Per Case
Sockeye, halves	$24 -25
Sockeye, quarters	14 -14.50
Alaska	
Red, talls	36 -38
Red, halves	23 -25
Pink, talls	24 -25
Pink, halves	13.50
Pink, 4-lbs. (12)	-25
Coho, talls	31
Coho, halves	18.50-19
Coho, quarters	-11.50
Chum, summer, tall	-22
Chum, summer, halves	12 -12.50
Chum, 4-lbs. (12)	-23
Chinook, talls	31 -32
Chinook, halves	24
Columbia River	
Blueback, halves	25 -26
Blueback, quarters	14 -14.50
Chinook, fancy, halves	25 -26
Chinook, fancy, quarters	-14.50
Chinook, choice, halves	17 -20
Chinook, choice, quarters	-11.75
Silver, halves	18.50-19
Silver, quarters	11.50-12.25
Tuna, Northwest Pack—	
Albacore, fcy., 7 oz.	13 -14
Yellowfin, s/pack, 7 oz.	11.00-
Yellowfin, chunk, 6½ oz.	9.50-10.10
Tuna, Featured Pack—	
Albacore, fcy, 7 oz.	14.85-15.25
Albacore, fcy., 3½ oz.	9.10- 9.15
Albacore, chunk, 6½ oz.	10.50-13.50
Albacore, chunk, 3 oz.	6.50- 8
Lightmeat, fcy., 7 oz.	14.25
Lightmeat, fcy., 3½ oz.	8.55
Lightmeat, chunk, 6½ oz.	11.00

New Chile Law Helps Nation's Fisheries

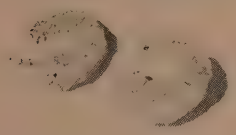
The Republic of Chile, by presidential decree published in April last, put into effect a number of measures calculated to stimulate the fishery industries and encourage investment of foreign capital in Chile's fisheries.

Complete exemption was granted from import duties for the acquisition of marine engines, fuels, lubricants and freezing equipment. Similar exemption was granted for importations of: vessels more than 10 tons; fishing equipment and machinery, including replacement parts; nets; refrigerated trucks, trailers and vessels; winches; components for freezing plants; and lacquered unlithographed tin plate destined for re-export in the form of cans.

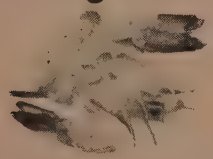
Other taxes and duties were reduced by as much as 90%, and a number of minor exemptions (such as the exemption from stamp taxes on corporate documents) were granted to companies and individuals engaged in the business of catching, hunting, freezing, canning and processing marine products.

The new measures have been received with enthusiastic approval by processors and exporters of Chilean marine products.

Isn't there more profit in selling shrimp...



than there is in selling shells?



The Peelers Co. specializes in automatic shrimp peelers, deveiners and graders.

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Joe Whitmore Continues on Fisheries Commission

When Canadian Fisheries Minister J. Angus MacLean was in Vancouver, B. C., recently, attending the annual meeting of the Fisheries Council of Canada, he paid a sincere tribute to the retiring area director, A. J. Whitmore.

"You all know that Joe Whitmore will be retiring soon," said Mr. MacLean. "It will be difficult to find a replacement for a man of his undoubted ability and prestige and impossible to find one with his experience. However, his knowledge of fisheries affairs will not be entirely lost to the industry, because he has consented to continue as one of Canada's members on the International Salmon Commission."

A successor to Mr. Whitmore will probably not be appointed until late this summer.

Puget Sound Fish Men Prove Good Fishermen

A boat load of Puget Sound commercial operators in the fishing industry went for a postman's holiday at Miami Beach while attending the National Fisheries Institute Convention there early in May, and proved themselves excellent fishermen.

Highliner of the party was Ray N. Burgess, Jr., of Rainier Ice & Cold Storage Co., who boated a 60 lb. marlin, virtually the first fish he ever caught in his life.

Second money went to Rufe Littlefield of Seattle Seafoods, Inc., who caught a black fin tuna, plus a wahoo.

Myer Bornstein of Bornstein Seafoods, Inc., Bellingham, and Norman Weitkamp of Washington Fish & Oyster Co., Seattle, each landed a black fin tuna.

The fifth member of the party, Jack McGoldrick, Rainier Ice & Cold Storage Co., made a "water haul."

Alaska Picks Pirtle As P.W.S. Biologist

Ralph Pirtle, District Biologist for the Alaska Department of Fish and Game, is the first commercial fisheries biologist to be stationed in the Prince William Sound area.

The State Department of Fish and Game policy is to locate their biologists in the district they are to manage.

"At present there is insufficient data on the commercial fisheries of Prince William Sound," Mr. Pirtle says. One of his major projects will be to accumulate all possible information on fisheries potentials of the District. A study of the salmon runs in the Copper River is also high on his list of essential work.

Guaymas Shrimp Fleet Sails Again

After a prolonged tie-up due to a price dispute, the Guaymas shrimp fleet put to sea again late last March. Prices quoted by the Market News Report late in May were 88-93 cents per lb. for whites 16-20, same as late in March, and lower than the $1.00-$1.05 current for the same size and class last year.

At Carmen and Campeche, on the Gulf coast, ex-vessel prices rose four times in April as a result of a price war raging in those ports. Salina Cruz prices, however, remain the same. In mid-May, prices of 65¢ per lb. were being quoted at Carmen for 15-20 white, brown and pink, while at Salina Cruz, browns of the same size were quoted at 53¢.

TWO GREAT BRAND NAMES IN FROZEN FRESH SEAFOODS

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Ship Ahoy

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Japanese Test Mid-depth Trawling in Bering Sea

(PF Staff Report)

A careful test of mid-water trawling is being made this season by all of the Japanese fish reduction fleets. It is reported that from one to several trawlers in each of the four Japanese reduction mothership fleets have been assigned specifically to the test operation.

Using the best available gear and technique developed elsewhere by experts in these fishing companies, their test operation has been recognized and approvd by the Fishery Agency in Japan. Object of the effort is catch of herring, codfish, pollack, etc. Keen technical competition is reported among the various test operators in this mid-depth trawling, and the result is being watched closely.

Calif. King Salmon Spawning Near Record

The largest King salmon spawning run since 1954 was recorded in 1959-60 by the California Department of Fish and Game.

Some 480,000 salmon spawned in the Sacramento-San Joaquin River system, the most important King salmon spawning area. In 1954, the number was 482,000.

Washington Fish & Oyster Co. Leases Cordova Plant

Washington Fish & Oyster Co., Seattle, has leased the Cordova Fish & Cold Storage Co., Cordova, for a period of five years with an option for purchase. The Alaska plant will produce a line of crab meat; canned salmon; and frozen halibut, salmon and black cod.

Dick Sutterlin, who continues his association with Ivar Wendt, Seattle, will be the manager. The plant was operated for many years by Joe Balestrieri, San Francisco.. Washington Fish & Oyster Co. of Calif., San Francisco, will be sales representative in the Bay area.

Costa Rican Shrimping Entering Active Phase

With 43 motor fishing vessels active in March, and three cold storages and two other packing houses busy, Costa Rica's shrimp industry was extremely active this spring.

Shrimping centered at Puntarenas, and this year it is anticipated that production may reach 1,500,000 lbs., considerably above 1959, whose 1,095,-700 lbs. of large shrimp constituted the largest production in the country's history.

Japan's Bering Herring Target 8,700 Tons

Japan's Bering Sea fishing operations have a target of 8,700 tons of herring for 1960, which will be taken by experimental fishing conducted by boats attached to the fish reduction factory ships operating primarily on bottom fish.

In addition, some smaller quantities of herring are expected to be taken by factory ships engaged primarily in freezing bottom fish.

It is presumed that herring fishing will be conducted primarily by some form of midwater trawling or open sea seining.

These developments in Japanese herring fishing in eastern Bering Sea cannot be attributed to withdrawal of Alaskan coastal herring from abstention under the International North Pacific Fisheries Convention, as at no time has Japan abstained from herring fishing in Bering Sea waters.

B. C. Dogfish Bounty Aids 1,457,000 lbs. of Livers

End of the Canadian dogfish liver bounty payments for 1960 on March 31 disclosed the payment of $145,780 for 1,457,793 lbs. of livers at the fixed rate of 10¢ per lb. The appropriation available was $250,000.

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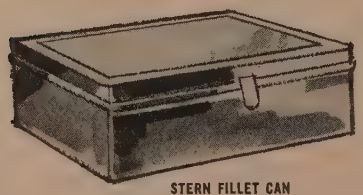

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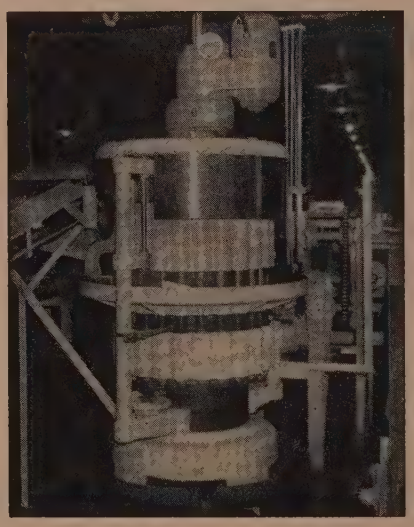

Leading tuna canners are now using the PAK-FORMER for their Chunk and Grated Style Packs. A variable speed drive permits filling speed adjustments of between 140 and 250 cans per minute. Available to the industry under similar terms as our PAK-SHAPER.

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Alaska Fish and Game Staff — Clarence E. Anderson, director, seated, studies as problem with the help of key members of his staff. From the left: **Jim Brooks,** Fur and Game; **Ed Marvich,** sports fish division; **Gil Ziemer,** engineering; **Dr. William Smoker,** biological research; **Walter Kirkness,** commercial fisheries.

One Alaska Biologist's Area Tops California, Oregon, Washington

● Steve Pennoyer has been named state commercial fisheries management biologist for Alaska's Arctic region.

Mr. Pennoyer, who previously worked as a fisheries biologist for the State of California, holds a degree in Wildlife Conservation from the University of California at Berkeley. He is overwhelmed by the size of his district, which includes the area from Cape Newenham (just above Bristol Bay around to the Alaska-Yukon Territory boundary on the Beaufort Sea. This is a region as large as Washington, Oregon, and California combined.

He went to work for the Alaska Department of Fish and Game last July, and since then has spent most of his time in the villages of the Yukon-Kuskokwim watersheds. At present the subsistence fishery for salmon is of the greatest economic importance in the region, but the potential for a commercial pack exists.

Mr. Pennoyer's first big job is to make an estimate of the size of the salmon runs in the Yukon and Kuskokwim Rivers. Aerial counts of salmon on clear-water spawning streams will be part of the basis of his final estimate. He also plans a tagging and tag recovery program.

"I'm having difficulty learning just how many fish the natives of the Yukon and Kuskokwim take for their own use," Pennoyer said. "I have had to fly from village to village counting fish hanging in smoke houses. The people seldom bother to count their fish, and they cannot understand why I want to know how many fish they have caught."

"I think they are wonderful people, for they help me all they can. They even pardon my insanity when I ask about number of fish they have caught. However, the sight of a state official crawling around on his hands and knees in a smokehouse, peering at row upon dimly lit row of oil dripping salmon and making notes on paper never fails to attract a crowd of laughing kids and smiling parents," Mr. Pennoyer laughed.

Pennoyer now plans an extended trip through the Arctic to learn about the winter fisheries for whitefish, sheefish and ling. While there he wants to learn more of the food requirements of the winter residents of the region.

Asked what he thinks of his present position, and why he left California, he replied, "In California the state is doing a fine job of trying to salvage the remnants of a resource. In Alaska we have a wonderful opportunity to properly utilize natural resources that are still in pretty good shape."

Pennoyer will work under direction of Charles Meacham, Alaska Department of Fish and Game Area Supervisor, Commercial Fisheries, whose office is at 326 I Street, Anchorage.

9,273 Cases Oyster Seed for Humboldt

Some 9,273 cases of oyster seed, the entire cargo of the SS *Montana,* were unloaded by Coast Oyster Co., Eureka, Calif., last month.

The shipment came straight from Japan. F. M. Douglas, manager, California district, Coast Oyster Co., says that since 1955 Coast has planted a total of 68,615 cases of spat, with 490,000-gals. of oysters produced and marketed.

Pacific Plants Produce 72% of Fish Cans

Pacific states can-making plants manufacture over 72% of the cans made in the United States for fish packing, according to a recent study of the subject released by the American Can Co.

What Do Japanese Intend Off Canada?

Announcement in Japan that a fisheries training ship, *Kano Maru*, belonging to the fisheries high school of Ishikawa Prefecture, has been authorized to act as a "fish meal survey ship" off British Columbia is occasioning interested speculation in Canada and the United States.

The vessel does not appear to be equipped for reduction, and it is presumed that her interest will lie primarily in estimating the tonnage of fish which might be available on the high seas off the Canadian coast.

As herring in the waters in question is still under abstention from fishing by Japan, the venture could hardly be directly connected with that fishery; although of course *Kano Maru* might be engaged in gathering data to support Japanese objections to the continuation of that abstention.

Eureka Fisheries Grows

Eureka Fisheries, Inc., Fields Landing, Calif., Budd Thomas, manager, is building a new 60x150′ addition to its plant.

The new addition will house a new fillet line and 52 filleters. A new holding room with a capacity of about a million pounds is also being built.

Japanese Canned Mackerel Production Proves Heavy

Fishing ports on the Pacific side of Japan are reported to have experienced exceptionally heavy landings of mackerel throughout the entire present spring. These fish are being packed in cans at an unusual rate, some of the tuna canneries devoting at least a part of their facilities to mackerel.

The pack is said to be designed in part for domestic use as well as export shipment.

South Africans Visit

Jack Ovenstone and John Newman, Walvis Bay Canning Co., Walvis Bay, Southwest Africa, were San Francisco visitors of James R. Townsend, fisheries consultant last month. The travelers went on to visit Peruvian and Japanese fisheries.

Japan's Atlantic Tuna Operators Form Group

The Atlantic Tuna Liaison Society was formed in March within the frame-work of the Japan Export Tuna Manufacturers' Association.

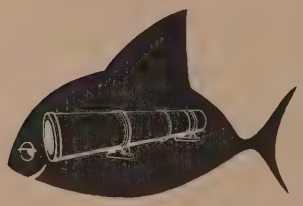
It is provided that the standing committee of the society shall be composed of representatives of these 10 companies: Taiyo Gyogyo, Nippon Reizo, Sumiyoshi Gyogyo, Kotoshiro Gyogyo, Hoko Suisan, Hokoku Suisan, Showa Gyogyo, Seiju Gyogyo, Azuma Boeki, Tokushima Suisan; and provision for adherence by any association member who may engage in the Atlantic fishery.

Principal purpose of the society lies in the presentation and exchange of information on the Atlantic tuna fishing operation, the marketing of its products, methods of operation and adjustment of marketing. Heretofore, although the catch and export quotas have been set, the overall aspects of the business, and particularly the disposition of the fish landed, have not been widely known.

Canco Contracts First Astoria Factory Work

First actual construction work on the new can factory which the American Can Co. will build at Astoria, Ore., was contracted early in April to the General Construction Co. of Portland. This calls for a seawall and fill to provide area 200 by 600′ on the Astoria waterfront immediately east of the Columbia River Packers Association's big Elmore salmon and tuna cannery.

PACKAGED STANDARD SYSTEMS



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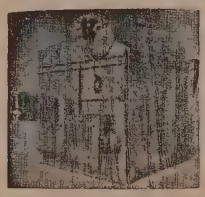

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LINES and LEADERS

Columbian Announces New Anti-kink "Plaited" Rope

Columbian Rope Company is introducing, exclusively in the U.S., a new "plaited" manila rope called Pli-Moor. It is laid in four sections of two strands which are woven together. It can be spliced; is now available in sizes from 6" to 10" circumference; is claimed to last twice as long as any regular three-strand manila, with far greater flexibility and increased resistance to abrasion. Weight and strength is reported to be approximately the same as for conventional Columbian Tape Marked Manila Rope.

Pli-Moor is made on special plaiting machinery to lengths of 120 fathoms for sizes from 6" to 9" circumference, and to 90 fathoms for 10". It is protected against water, rot and fungi by Columbian lubricants.

Raytheon Has New 40-Fathom "Holiday Mark II" Fathometer

Raytheon Company has announced availability of a new 40-fathom "Fathometer" depth sounder. Called the "Holiday Mark II," the new indicating "Fathometer" offers deep water soundings from one to 240 feet.

The original "Holiday," which indicates depths to 120 feet, was introduced four years ago; the new deep-water Raytheon depth sounder is only 8" wide by 7" high by 7" deep. A trunnion mount makes it possible to install it anywhere; it has a patented light trap for positive viewing even in bright sunlight.

Operating from 12-volt DC power supplies, the new model draws only 1½ amps. The "Holiday Mark II," complete with transducer and ready for installation, is priced at $199.50.

Exide Advances C. J. Moore to VP-Marketing

C. J. Moore, formerly general sales and marketing manager of Exide Industrial Div., The Electric Storage Battery Co., has been promoted to Vice President-Marketing of the division. He will continue to direct policy for all national sales and marketing activities for Exide equipment.

Bendix Has New 4-Channel Citizens-Band Transceiver

A new and Type-Accepted model Citizens Band transceiver is now available from Bendix-Marine, North Hollywood, Calif., that operates from any of three power source voltages: 6 or 12 volts DC, or 115 volts AC. Four crystal controlled channels are provided for use in the 27 mc band assigned by the FCC for business and personal communication networks.

The Bendix CB has been built for marine and industrial use by persons or firms in need of a dependable communications network. Typical uses include sport and commercial fleet operators, businessmen who need communications between boats and offices, homes and boats or between boats such as tugs and passenger launches.

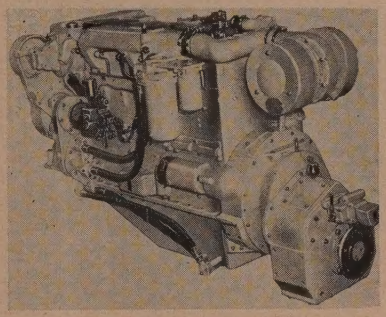
Among the many features of the Bendix GB is an automatic noise limiter, adjustable squelch to reduce background noise, and a universal built-in power supply with two sets of connecting cables to either the DC or AC source.

Size of the Bendix CB is only 4½" high, 7" wide and 10" deep; weight is 11 pounds. Complete with ceramic microphone, mounting bracket, one set of crystals and two power source cables, the price is $159.95.

Canco and the "Perfect Container"

A new series of double page advertisements in trade journals, beginning in June, dramatize the inventive technology having made the Canco Division of American Can Company a trail-blazer in the container industry and a key contributor to progress in many other areas of business.

"The perfect container doesn't just happen!" is the theme of the campaign prepared by Canco's agency, Compton Advertising, Inc., whose creative staff has drawn upon Mother Nature to drive home the point. The first ad in the series illustrates the theme with a brightly colored drawing of an oversized egg from which a sassy toucan is being hatched. Other ads in turn will feature a turtle, a kangaroo, and a pelican, all of which are reminders that "The perfect container does what it's supposed to do"—in nature as well as in the container field — and "Great container ideas come from Canco."



New low profile marine diesel, introduced by Cummins Engine Company, Inc., is a turbocharged six-cylinder engine. The NRTO-6-M develops 220 hp at 1800 rpm for work boat applications.

Cummins Announces New Low-Profile Marine Diesel

Cummins Engine Company, Inc., announces a new low profile marine diesel, the NRTO-6-M, a 6-cylinder turbocharged engine.

It can be installed in tighter compartments than turbocharged engines previously available in this horsepower.

The NRTO-6-M develops up to 335 hp for pleasure craft use, and 220 hp at 1800 rpm for work boats. The bore and stroke are 5⅛" by 6", total displacement is 743 cu. in. and the compression ratio is 14.5 to 1.

The new low profile NRTO-6-M is a 4-cycle engine with the cam-actuated Cummins PT fuel system said to eliminate timing problems. Water jackets are available on the turbocharger; oil bath cleaners, heat exchanger and sea water pump are standard equipment. The engine has removable wet liners for ease and low cost of maintenance. Operating economy is accomplished by the burning of #2 fuel. The engine has a weight to horsepower ratio of 9.1 lbs. per horsepower.

Lister-Blackstone Adds Portland Engine Dealer

Andrews & Andrews Equipment Co., at the foot of S. W. Gibbs Street in Portland, Oregon, has been appointed as a distributor for Lister diesel engines, according to a recent announcement from Lister-Blackstone, Inc.

New general manager of the Momoi Co. office in Long Beach, Calif., is Kazuo Wada, shown in this photo with Ben Ichiyasu, left. Mr. Wada comes direct from the Ako, Japan, headquarters of Momoi Fishing Net Mfg. Co., where he was chief of Momoi's Pan-American Section, having been with Momoi for nearly three years. Mr. Wada will have charge of U.S. sales, and some supervision over Momoi offices in Canada and Latin America. He is replaced in Ako by T. Yamano, new chief of the Pan-American Section.

Standard Oil Co. Announces New Lubricating Oil on Market

A new lubricating oil, Super "RPM Delo" Special, developed especially to upgrade the performance of diesel and heavy duty gasoline engines, has been introduced by Standard Oil Company of California.

It is said to be a major advance in lubricating oils assuring equipment operators longer, more trouble-free engine life, with greater bearing protection, cleaner pistons, rings and valves. Fortified to a new degree with special Detergent-Action additives, corrosion and oxidation inhibitors and effective defoaming agent, this new oil is "far ahead of diesel engine design."

Super "RPM Delo" Special has been thoroughly tested in the laboratory and under severe field conditions. Because of its wide work range (difficult-to-severe service), it reportedly has proved particularly effective for simplifying mixed fleet operations. It is especially designed, too, to control the bad effects of high sulfur diesel fuel. In performance, it is said, it far exceeds requirements of API Service Classification DG and DM.

Anderson-O'Brien Opens New Branch in El Cajon

Anderson-O'Brien Company, GM Diesel Distributor in Los Angeles, has announced the opening of a branch office in El Cajon, California.

According to A. N. Anderson, Anderson-O'Brien General Manager, the new branch has 7000 square feet of service area and is equipped to provide diesel service for all types of equipment, including marine. Anderson-O'Brien's new branch will service Orange, Riverside, San Diego, and Imperial counties.

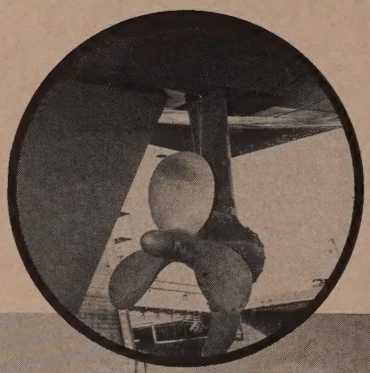
Staffing the new office is Ed Steckline, parts manager; John Sullivan, service manager; Jack Deakins, sales representative; and Ray Banning, service representative.

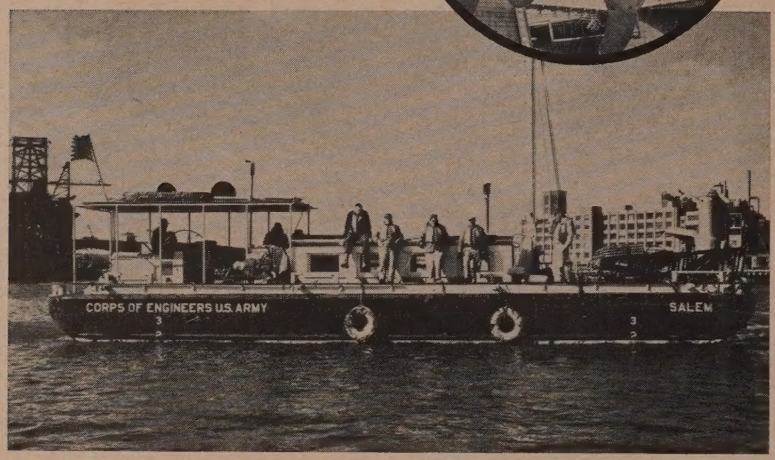
The new branch is located at 801 Gable Way, El Cajon. The telephone number is HIckory 2-9411.

Three New Dealers For Osco Motors

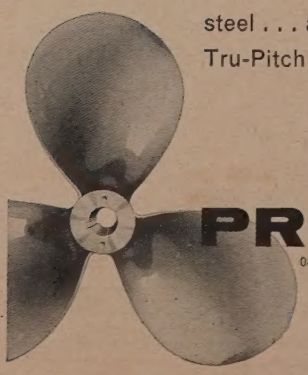
The Breakwater Yacht Brokerage Co. of Santa Barbara, Calif., The Crystaliner Marine Way of Morro Bay, Calif. and The Samson Boat & Allied Industries Inc. of Las Pinas, Rizal, Philippines have been appointed dealers for the complete line of OSCO FORD Diesel & Gas engines as of May 1, 1960.

Odd Jobs?





Yes . . . "odd jobs" or conventional applications, you'll almost always find FEDERAL in the picture. For instance, what could be more unusual than this rig used by the U.S. Army Corps Of Engineers, with its inboard-outboard propulsion and steering unit. Murray & Tregurtha, Inc. of Quincy, Mass. make the unit, and of course they equip it with a FEDERAL Tru-Pitch Propeller. Perfect static balance, precision pitch and tough Federal "B" alloy make it the world's finest all-purpose prop for maximum efficiency, smoothest operation, longest life and easiest repairability. Right or left hand . . . two, three or four blade . . . bronze alloy or cast steel . . . any size to 72" diameter . . . FEDERAL Tru-Pitch is your best bet!



FEDERAL
PROPELLERS
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GRAND RAPIDS 2, MICHIGAN

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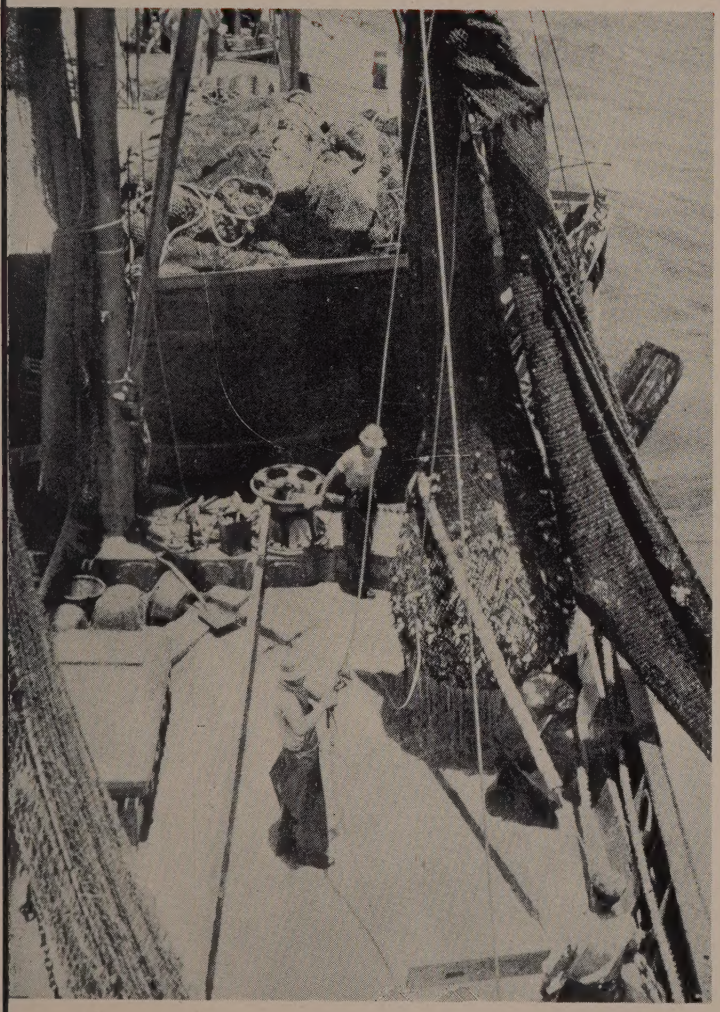
Created to give...

MAXIMUM SAFETY TO FISHERMEN!

GREATER CATCHING POTENTIAL!

-"MANRYO" NETTING-



Wider safety margin from -

- Non-Slippage of Knots
- Low Moisture Absorption
- Light Weight
- Easy Handling

Increased catch from -

- Less Resistance to Currents
- No Need of Drying
- No Damage to Fish

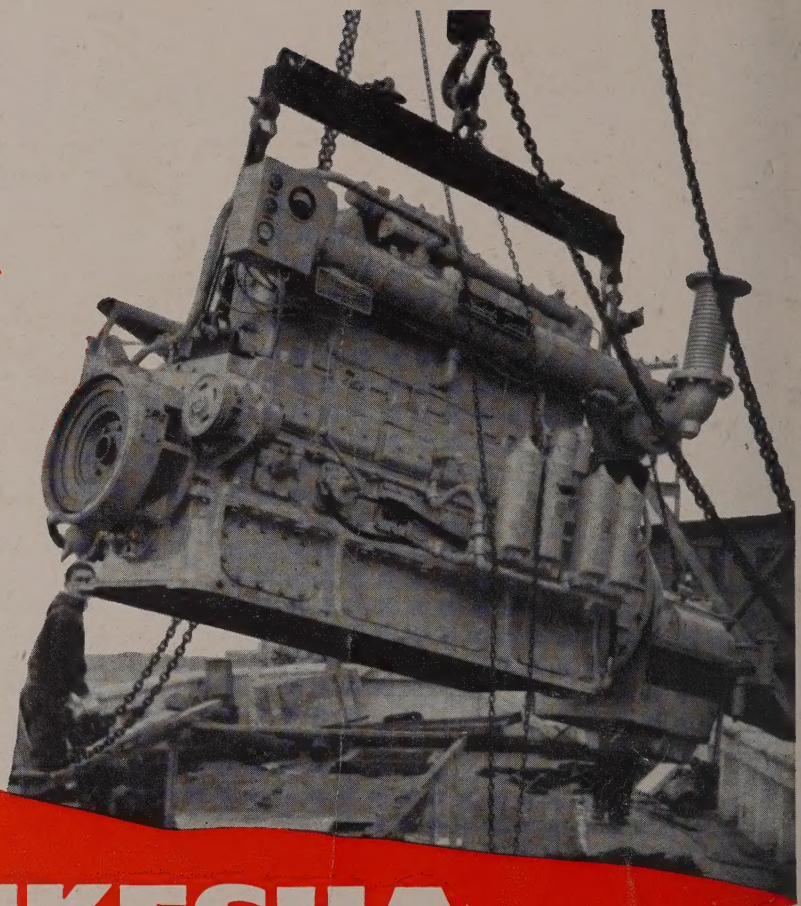
.....together with Rot Proof • Strong Sunlight Resistance • LOW COST, all of which make "MANRYO" the indispensable netting for any fishing boat.

KURASHIKI RAYON CO., LTD.

HEAD OFFICE: 2, Umeda, Kita-ku, Osaka, Japan
CABLE ADDRESS: "KURARAY OSAKA"

Coming aboard!

BIG POWER and
NEW PERFORMANCE
for the 97 foot
ELEANORE & ELSIE



it's a WAUKESHA *Defender* MARINE DIESEL

Captain Jack Jacobs is glad to bid "welcome aboard" to the new Waukesha Diesel. The 97′ x 21′ x 12′ scalloper dragger *Eleanore & Elsie* is taking on a smart, new look with new steel trunk, new wheelhouse at the stern and other features. Most important of all is her new engine—a Waukesha *Defender* (Model LRDBCSM) Turbosupercharged Marine Diesel that will put out 510 hp at 1215 rpm continuously per 24-hour duty day. This 2894 cubic inch engine has six cylinders, 8½ x 8½-inch bore and stroke, and is fitted with a Snow-Nabstedt reverse-reduction hydraulic gear 3:1 ratio. Installation was made by Hathaway Machinery Co., Inc., of Fairhaven, Mass. Waukesha dependability pays off—in power and in profits—send for bulletins.

WAUKESHA MOTOR COMPANY
Waukesha, Wisconsin
New York • Tulsa • Los Angeles
Factories: Waukesha, Wisconsin and Clinton, Iowa 483